1-2010

Natural High Prevention Platform: A Search-Based, Substance Abuse Prevention Program for Sundt Memorial Foundation

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naturalhigh
By Sundt Memorial Foundation

February 25, 2010

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Dear Pat,

On behalf of our staff and board of directors at the Sundt Memorial Foundation, I would like to take a moment to acknowledge the exemplary work of a small team of NPLM students who recently completed a research project for our organization.

The Sundt Memorial Foundation's mission is to influence the hearts and minds of kids by inspiring them to choose a natural high and reject drugs. While the organization has been in existence for nearly 15 years, it has just recently begun to concretize and fully develop its Natural High® DVD prevention program, which is currently operating in thousands of schools across the country.

The "Natural High Prevention Platform: a research-based, substance abuse prevention program," designed by Jennifer Martin, Kay Costilow, Rose Baxter and Maureen Guarcello could not have been more timelier as our organization has been preparing to embark on a five-year strategic plan and major donor campaign to ***reach more kids***, ***more often*** and ***more effectively*** with the natural high message. Obviously, the successful execution of this plan, both in terms of raising funds and demonstrating real change, will require us to ensure that our existing program and any new initiatives are research-informed, documented and that impact is measured. The research completed by the students will serve as our foundation as we prepare to scale up.

With the time consuming demands of this class, it would have been easy for the students to design a "traditional" drug prevention program based on best practices from the literature. However, I really appreciate that they took special care to develop a program that met both the objectives of their coursework ***and*** the needs of our organization, especially in creating a design that could be implemented locally but also nationally. I am thankful that they took time to identify the best practices from the literature and then combine them with our organization's "hip, cool, multi-media" philosophy to create a program that, if funding was available immediately, I could likely implement as-is with enthusiasm from my staff, board and key community stakeholders.

While we serve thousands of kids across the country, we are still a small nonprofit organization with limited financial and human resources. There is no way we could have afforded the staff time or expense of paying a consultant to complete the extensive work of these students on our behalf and for that we are grateful. Over the last several months, I have shared their project with my staff, have referenced the literature review for our major donor campaign and am also considering utilizing some of the student and parent-specific program components as we formalize and scale up.

I can't begin to thank the students for their outstanding work. I sincerely believe that their work will aid us in transforming more lives through the natural high message.

Warmest Regards,

Michelle Ahearne
Executive Director

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Needs Assessment

Target Population and Problem

North coastal San Diego was rocked two months ago when a 17-year old boy from Torrey Pines High School was killed in a car crash (Davis, 2009). The accident involved five teenage boys from communities of high socioeconomic status (SES) and the illegal consumption of alcohol. This tragedy occurred just prior to San Diego's countywide Red Ribbon Week (RRW)[1] and made a bold statement that youth substance use continues in communities of high SES, posing a real threat. On December 11, 2009 a 17-year-old girl was killed in a North County car accident. The 17 year old driver of the vehicle was arrested on charges of driving under the influence (DUI) and gross vehicular manslaughter (Sifuentes, 2009). In the wake of these tragedies, experts have declared, "North County is one of the state's hot spots" for underage alcohol-related deaths and injuries (Davis, 2009).

Youth residing in high SES communities have historically been perceived as a low-risk population, while youth residing in low SES communities were considered "special populations" and were the highest focus for substance abuse programming and research (Hegamin, Anglin, & Casanova, 2002). Newer evidence shows that teens from high SES families are actually more likely to use alcohol, drugs and other substances than low SES teens (Hanson & Chen, 2007; Luther & Latendresse, 2005; Bogard, 2005). Research supports a propensity towards packed student academic and extracurricular agendas, leaving little time for quality, family interactions and parental support (Luthar & Shoum, 2006).

Achievement pressures and lack of parent support weighs upon high SES teens and increases the likelihood that they will turn to drugs and alcohol (Hanson & Chen, 2007).

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[1] Red Ribbon Week brings people together to raise awareness regarding the need for alcohol, tobacco and other drug and violence prevention, early intervention, and treatment services. It is the largest, most visible prevention awareness campaign observed annually in the United States (redribboncoalition.com). Red Ribbon Week is the only substance use prevention programming administered in Carlsbad School District for one week every fall.

Achievement is higher in high SES communities when comparing 2008 California State Academic Performance Index scores to low SES community schools. *See appendix: API Test Scores.* Maintaining these high achievement levels causes high levels of stress in high SES youth.

High SES communities report a high rate of adolescent drug use as a means to "escape from problems" or "relax," with affluent teens using substances as a coping mechanism for their distress (Bogard, 2005). These problems are illuminated by the alcohol-related deaths of the North County teens (Davis, 2009) and an affluent Orange County teen on August 27, 2008 (Brkovic, 2009). High SES teens feel safer experimenting with substances than low SES youth, further illustrating the unique characteristics of this population and a need for intervention. Validated by local law enforcement, Carlsbad youth are at high-risk for substance use due to their unique stressors and access to such substances (Davis, 2009). Youth, ages 12-17, residing in high SES communities, actively engage in substance use, despite access to and participation in substance abuse prevention programs.

Target Population

The Sundt research team identified the target population for substance abuse interventions in Carlsbad, a community with a single school district, high SES criteria, and a need for increased youth, parental and community engagement in substance abuse prevention. Carlsbad, population 104,652, is a north coastal San Diego County community. The reported median household income is $101,295 per year, compared to $69,951 countywide (SANDAG, 2009). The high SES status of Carlsbad is also supported by 93.1 percent of the population achieving a high school diploma and 45.7 percent a bachelor's degree or higher (CENSUS, 2000). Law enforcement recognizes Carlsbad as a region where underage substance use is a growing problem; compounded by youth representing 24 percent of the population (SANDAG, 2009). In 2007, Carlsbad juvenile (ages 10-17 years) arrests included the following violations: 56 for drugs; 34 for intoxication or liquor law

violations; and 15 violations for driving under the influence. Carlsbad DUI arrests increased 250 percent from 2006 to 2007, with juvenile arrests up 12 percent in the same time-period (SANDAG, 2008). Crashes involving youth and substances in San Diego County have increased 50 percent over the past 10 years (The Children's Initiative, 2007).

Reported substance use dramatically increases from middle to high school, as the risk of substance use tends to be highest in points of transition in a youth's life (NIDA, 2003). This underscores the importance of effective substance abuse prevention for middle school youth. Within the Carlsbad School District (CUSD), 919 students attending Aviara Oaks Middle School (AOMS) in grades 6-8, represent a high SES target population. Demographics include: 66 percent Caucasian; 16 percent Hispanic; 8 percent Asian; 3 percent African American; and 7 percent other or unspecified descent (California Department of Education, 2009). Drug use is often first encountered during adolescence. Data from the National Survey on Drug Use and Health shows that youth are engaging in substance use as early as 12 or 13 years. Early use typically includes the following substances: tobacco; alcohol; inhalants; marijuana; and psychotherapeutic drugs. When substance use begins at an early age, the adolescent is likely to continue experimenting with other illegal substances (NIDA, 2003).

Substance use results in serious outcomes, for the user and the family, school and community with emotional, fiscal and legal ramifications. The recent deaths of teens from high SES communities echo the severity and negative consequences of ignoring the unique needs of these youth. These negative outcomes may be avoided if effective and population-sensitive prevention methods are employed. Unfortunately, there has been insufficient effort invested towards high SES communities in San Diego to identify the critical determinants and needs of youth, in order to combat the explosion of substance use and the loss of lives.

Focus Groups, Key Informant Interviews and Surveys

To assess community-specific needs, the Sundt research team facilitated two focus groups and conducted six key informant interviews, and 15 surveys of the parent population. The convenience focus group consisted of eight Carlsbad High School students - six girls and two boys, grades 10 to 12, in a local park. Questions focused on perceived substance use in high school, perceived effectiveness of substance abuse prevention programs, and factors impacting substance abuse prevention. The second focus group was a snowball sample, conducted with six students from AOMS, five girls and one boy, sixth to eighth grade. Questions pertained to student's general knowledge of substance use among peers, unique life and academic stressors, triggers of substance use, current prevention programs, and perceptions of effective programs.

Key informant interviews included Carlsbad law enforcement, nonprofit organizations, and CUSD administrators. Interview questions focused on informant's perceptions of Carlsbad community youth substance use, root causes, and suggested improvements for local substance abuse prevention programs. Several participants stated high expectations from parents and community as a determinant of substance use for this population of youth. Interviews revealed that engaging parents in substance abuse prevention is essential.

Parent perceptions were surveyed with questionnaires at a RRW presentation hosted by AOMS. The presentation was organized for parents to address concerns of youth substance use. Questions focused on the parent's level of concern for their child, drug use in the Carlsbad community, youth access to substances, and perceived effectiveness of substance abuse prevention programs. Parent responses indicated peers and siblings as sources of substance access. Parents expressed concerns regarding new social ordinance laws, ticketing parents for hosting underage drinking, and new youth trends including party buses, a vehicle, taking multiple passengers from venue to venue, with alcohol on-board.

Several key findings developed from this research. First, identified at every level of research, youth substance use is a growing problem within the Carlsbad community. Second, active parental engagement is missing in prevention programs. Focus group youth supported this, stating that their parents, "just don't talk to them about it (drugs)." Determinants to high SES youth substance use, which surfaced in all levels of research, are: extreme pressures to succeed in academics and extra-curricular activities; pressure to outperform peers; little to no parent involvement in substance abuse prevention; ineffective prevention programming administered for one week in the school; and easy access to alcohol and other substances.

The research points to several key components needed to address the need to deter high SES youth from substance use. Family, community, and substance abuse prevention programs in schools are all vital in influencing youth to abstain from substance use. Data gathered from the community assessment, youth focus groups, parent surveys, and key informants imply that these three components are not currently effective in preventing high SES youth in Carlsbad from using substances. The essential role of parents appears to be missing as a protective factor to high SES youth in this community. Our data shows parents as a risk factor in this population, due to the high pressures placed on youth and a failure to engage youth in conversations pertaining to substance use resistance. High SES youth also report having easy access to substances from multiple sources. Parents, environment, and community play an important role that is currently lacking for this population. Substance abuse prevention literature reveals a Triadic model (Flay, 2002) as the ideal program structure to address the vital needs of youth to make appropriate decisions regarding substance use. A Triadic model of substance abuse prevention includes parents, community and school. The Triadic model may serve the high SES community of Carlsbad in prevention, as it works to alter parents, community and school into protective factors for these youth.

Program Design and Methodology

Literature Review

Overview. This review presents research that addresses the dangers of substance use in an understudied population, high SES youth. *See Appendix A: Literature Review Matrix*. By taking a closer look at prevention and resilience literature, a negative relationship appears between parent/child relationships and socioeconomic status. Factors that one might typically expect to protect youth from substance use in high SES communities, such as educated parent and school success, are shown in the literature to actually create risk factors contributing to increased substance use. The Triadic model of influence along with resilience, and the associated risk and protective factors are part of primary theories of substance abuse prevention (Flay, 2002; Meschke & Patterson, 2003).

Theory of Triadic Influence over risk and protective factors. The Theory of Triadic Influence covers the domains of individual, social-normative, and environmental risk and protective factors as described by Flay (2002). *See Appendix J: Triadic Model.* Protective factors create resilience which guards individuals from social, environmental, psychological, and physical risk factors that influence youth to use substances. Similarly, Meschke and Patterson (2003) use an ecological framework including the individual, family, school and community.

Risk and protective factors for the Triadic individual domain include: age of substance use initiation; self-esteem; coping skills; self efficacy; social skills; psychological health; personality; prior behaviors; self-control; genetics; and personal adoption of societal values (Flay, 2002; Meschke & Patterson, 2003; Sale, Sambrano, Springer & Turner, 2003). Studies indicate, adolescents are less rational decision-makers, are not adept at self-monitoring and feedback, and have increased impulsive tendencies (NIAAA, 2004/2005; Luna et al., 2004; Sale et al., 2003). Self esteem created by home and school interactions is a protective factor, creating resilience against

substance use (Donnelly, Young, Pearson, Penhollow & Hernandez, 2008). Unfortunately, self esteem specific to peers and social popularity has been shown by research to increase substance use (Bogard, 2005; Donnelly et al., 2008). Psychologically, affluent adolescents report increased symptoms of depression, higher rates of substance abuse, low parental closeness (discussed below) and are using drugs and alcohol to self-medicate (Bogard, 2005).

Triadic social normative influences are defined as: family relationships; parental closeness; parental norms and attitudes; parental substance use; school connectedness; and peer influence. Parental closeness is a leading protective factor against high-risk activities (Donnelly et al., 2008). Bogard (2005) shows an inverse relationship between SES and parental closeness, evidenced by high SES youth reports of up to 14 percent less closeness towards parents, in families earning $100,000 annually, compared to low SES youth from families earning $10,000 annually (U.S. Department of Health and Human Services, 2001). Additionally, high SES youth demonstrate higher levels of substance abuse (Bogard, 2005). Compounding the problem is parental and societal pressure to excel academically; increasing the likelihood high SES youth will use substances to relieve stress (Bogard, 2005; Luthar & Latendresse, 2005). Adolescents also observe adults using substances such as alcohol, as a reward for hard work and to relax.

The Triadic model and substance literature shows connectedness includes dimensions of: support systems; commitment and involvement; or closeness between parent and youth, parent and school, and youth and school. School connectedness creates resilience by building self-esteem and deterring substance use (Flay, 2002; Meschke & Patterson, 2003; Sale et al., 2003). However, school transitions to middle, high school, and college are critical turning points in life for decision making and increased risk factors. During these times youth show an increased risk for substance use when disconnected from families and schools. They instead rely on peer support and normative values of those who may use substances (Oetting & Beauvis, 1987; Sale et al., 2003). Societal

norms and cultural acceptance of substance use, particularly alcohol, are strong risk factors without a parental influence of abstinence (Meschke & Patterson, 2003; Sale et al., 2003). A laissez-faire or hands-off parental attitude towards substance leads youth to adopt views of substance acceptance (Flay, 2002; Miller-Day, 2008). Conversely, Miller-Day (2008) showed families who actively discuss substances and set zero-tolerance for substance use show delayed and decreased youth substance use. Meschke and Patterson (2003) confirm community norms of substance use are deeply rooted. Additional, literature illustrates community, schools and their respective norms contribute to greater individual power and autonomy associated with lower substance use among youth (Meschke & Patterson, 2003). Therefore, opportunities exist within the community to create and support a protective environment as a protective barrier to increase resilience against substance use (Meschke & Patterson, 2003).

Substance Use Prevention Framework. Substance use prevention research conducted over the past twenty years lacks independent and standardized evaluation mechanisms, making it difficult to provide evidence of program effectiveness. Only recently, government agencies recommended standards for evidence-based substance use programming in schools and communities (Gandhi, Murphy-Graham, Petrosino, Chrismer, & Weiss, 2007). Regular evaluation of outcomes and effectiveness ensures substance use prevention programming is relevant. One program, *DARE* (Drug Abuse Resistance Education) is widely recognized and evaluated, yet showed no long-term effects on behavior (Ghandi et al., 2007). Ghandi et al. reviewed evaluation criteria and outcomes from five recommendation lists for middle school programs: Life Skills; Project Alert; Midwestern Prevention Project; Project Northland; and CASASTART. Life Skills was the most evaluated and showed decreased substance use outcomes, yet evaluation bias in every one of the programs may have occurred (Ghandi et al., 2007). Research has shown that surveys

such as the Monitoring the Future have helped standardize substance prevention programming (National Institute of Health, U.S. Department of Health and Human Services, 2006).

Current and seminal literature about substance use prevention supports Flay's (2002) Triadic model as an ideal prevention framework. Meta-analyses of substance use prevention program components shows a need for modeling based on multidisciplinary theories and sustained change in youth behavior. The Triadic model accomplishes this by addressing cognitive, social learning, and bonding theories within individual, social normative and environmental domains of resilience (Flay, 2002; Meschke & Patterson, 2003). It is important to note that no single strategy can be effective alone, since each risk and protective domain must be addressed within the family, school, and throughout the community (Flay, 2002; Ghandi et al., 2007). Key concepts addressed in the design and implementation of programs that use the Triadic model include: long-term developmentally and culturally appropriate interventions; positive youth development; policy; organizational and environmental support for pro-social parental, peer, and school connectedness; community needs assessments to incorporate appropriate evidence-based programs; and coordinated implementation through skilled leadership (Flay, 2002; Ghandi et al., 2007; NIAAA, 2004/2005).

Program length and location. Early meta-analyses of drug prevention programs by Tobler and Stratton (1997) found programs of at least 18 hours in length helped decrease youth substance use. Research shows programs are most effective when intervention include a combination of skills development, along with attitude and behavior changes. However, Flay (2003), found most programs did not correlate the risk and protective factors to behaviors and only consisted of few sessions without long-term follow-up. Flay (2003), Ghandi et. al. (2007), and Buckley and White (2007), found that reinforcement of prevention content at progressive grade levels and community components, would exemplify the Triadic model. The literature showed the Life Skills program was more effective implemented in a mini-course format than in the classroom. Finally, when

family and community programs are implemented in tandem with school-based prevention programs they can show significant impact (Ghandi et al., 2007).

Cultural and developmental appropriateness. Highly effective programs include relevant, culturally and developmentally appropriate material (Flay, 2002). Community assessments identify the unique population needs such as those of high SES youth to create more effective interventions. Success increases with student, parent, teacher, administrator, and community input (Flay, 2002). Innovative technologies of web-based prevention programming show promise but have only recently begun to be studied. The option for wide-scale dissemination to parents and youth via the internet may overcome the potential challenges, and programs can be validated with carefully implemented development and evaluation (Schoench, 2007). Online guided student journaling has proven effective in educational and goal-setting environments, increasing participant independence and their future orientation (Campbell, 2009).

Substance prevention strategies must take into account that American culture is visually oriented and receptive to learning models incorporating video, music, peer and celebrity role models (Escobar-Chaves & Patterson, 2008; Warren et al., 2006). As such, The Substance and Mental Health Services Administration (SAMHSA) approved a video series, *Keepin' it Real,* using culturally appropriate messages of resistance and abstinence in a package attractive to adolescents (Warren et al., 2006). *Keepin' it Real* utilizes peer-to-peer videos, community messages, and school spirit sessions to integrate communication competence theory, resistance techniques, decision making, and life skills. An evaluation of program outcomes showed watching a minimum of four to five of the 10 videos was effective in the reduction of past month substance use (Warren et al., 2006).

Teachers are instrumental in the delivery of substance prevention content, but they may not be as effective as external trainers (Buckely & White, 2007). Drug educators and community

experts are better equipped than teachers, with the knowledge of substance prevention, including life skills, pro-social skills, resistance techniques, and norm setting. Studies found students are more responsive to straight talk from ex-substance users and peers but not responsive to fear tactics from teachers (Buckely & White, 2007, Warren et al., 2006). In high SES groups with low parental closeness, abstinence messages must be woven into family and socio-normative values (Bogard, 2005; Flay, 2002; Luthar & Latendresse, 2005).

Early and repetitive intervention has been found to be critical in combating risk factors occurring during cognitive development, and teaches protective skills necessary to navigate the impulsivity and irrational decision-making associated with adolescence (Luna et al, 2004; NIAAA, 2004/2005; Sale et al., 2003). The literature further shows in order to maximize program impact, reinforced school and community messages of zero tolerance must be consistent and a safe environment of open communication for adolescents should be provided (Flay, 2002; Meschke & Patterson, 2003; Sale et al., 2003). Positive youth and family development is an important goal in developing effective programming.

Positive youth and family development. Positive youth and family development is based on the creation of protective factors countering the Triadic model risks with a consistent theme of resistance, good decision making, and increased self-esteem through future-orientation and goal setting (Flay, 2002; Meschke & Patterson, 2003). High SES parents, due to low parental closeness must learn to engage their youth in active family discussion related to substance use and support a substance-free environment (Meschke & Patterson, 2003; Sale et al., 2003). To extend programs into the community, Flay (2002) and Meschke and Patterson (2003) recommend strengthening connectedness by engaging adolescents in community service, which could consist of volunteering in a clinic, with local law enforcement, or youth agencies. As previously discussed, community support and connectedness of high SES youth is a protective factor towards resilience (Bogard,

2007). By increasing resilience through the promotion of protective factors with effective substance prevention programming, the risk factors affecting substance use in high SES youth can be minimized.

Purpose of study. The purpose of this study is to prevent high SES youth, grades six to eight, in Carlsbad from engaging in substance use. After reviewing the needs of the community and corresponding literature, the SMF research team suggests an intervention strategy using the Triadic model as a platform for substance abuse prevention programming. Fidelity in the implementation of the Triadic approach will be effective by focusing on family, individual and environment. *See Appendix B: Logic Model Matrix.*

Program design. The SMF substance abuse prevention program in Carlsbad is designed to target high SES youth, parents, and community. The needs assessment states that high SES youth continue to participate in substance use, despite access to school-based substance abuse prevention programming. Key contributors to the issue are: (a) a lack of positive parental involvement and interaction between high SES parents and their youth; and (b) a lack of programming including community, family, and individual.

The goal of the intervention is to prevent high SES youth from engaging in substance use. In order to accomplish this goal it is necessary to design and implement new programming in a high SES community, including parents, the community, and the school. The program will include a consecutive three-year intervention (*See Appendix D: Research Design)* at AOMS, introduced to 100 sixth graders in fall 2010 and continuing through spring 2013 - their eighth grade year. New program components will be supplemental to current school programming of RRW. The following objectives and implementation activities have been developed based on program components supported by extensive research. *See Appendix C: Scope of Work/Workplan.*

Objective 1 – encompasses the overarching goal of the study. From the beginning of the school year 2010 through the end of the school year 2013, Carlsbad youth, grades 6 to 8 at AOMS, will demonstrate a decrease by 20 percent, the number of high-SES youth that participate in substance use, as measured by the California Healthy Kids Survey (CHKS). To achieve this outcome, SMF will implement a Triadic model of programming that uses an interactive website, along with community service, and parent involvement. This objective will be measured through the CHKS based on the constructs of self-reported substance use and frequency of use.

Objective 2 – focuses on parent involvement and knowledge. From the beginning of RRW 2010 to the end of RRW 2012, 75 parents at AOMS who complete a *household substance abuse risk assessment* will demonstrate a 15 percent increase in knowledge competency of how to prevent their youth from engaging in substance use, as measured by a knowledge assessment to be created by SMF and an external consultant, reviewed and collected annually, over three years. SMF will create the assessment tool based on the following constructs: family relationships, access to substances within the home, parenting styles, and family norms of substance use.

Objective 3 - By the end of RRW 2011, 75 parents at AOMS who watch a web-based video, will demonstrate at minimum a 15 percent skill competency increase in how to effectively communicate with youth to prevent substance use, as measured by pre-and post- video assessment answers, collected and reviewed by SMF. This outcome will be measured by an evaluation tool created by SMF administered pre- and post- video viewing on the constructs of communicating to their youth about substances.

Objective 4 – focuses on reaching high-SES youth through creative programming. Between RRW 2011 and RRW 2012, 100 students at AOMS who participate in an interactive *Natural High Electronic Journal,* will demonstrate a 10 percent increase in their ability to set goals in a self-regulated environment to prevent substance use, as measured by entry records, collected and

analyzed by a program coordinator, specialty software, and the CHKS. To achieve this outcome SMF will create a guided electronic journal, prompting students to focus on goals and aspirations for their lives. NVivo software will qualitatively measure student entries. CHKS will measure them quantitatively through goal setting questions.

Objective 5 & 6 - focus on the process of funding. By December 31, 2010 SMF will secure the necessary funding to produce a web-based video and interactive website targeting parent/youth interaction regarding substance use. SMF board and staff will determine necessary budgets, seek funding, and review fiscal reports to secure the funds.

Objective 7 - incorporates community involvement. By the end of the school year 2013, 100 students at AOMS, who completed 5 hours of community-based substance abuse prevention programming, will demonstrate a minimum of 15 percent favorable increase in the following three areas as measured by the CHKS: protective factors and assets of caring relationships; connectedness to community; and connectedness to school. SMF will engage members of both the school and community for students to participate in the community-based substance abuse prevention programming.

Objective 8 – is a process objective that focuses on maintaining the cultural relevancy and implementation integrity of programming within Carlsbad. By the first day of school 2010, SMF will develop an advisory board, with a minimum of 10 stakeholders, representative of parents, youth, community partners, and school leaders to provide ongoing consultation of the Natural High Prevention Platform. To achieve this SMF will identify key contributors and form a meeting schedule prior to the start of the 2010 school year.

Methods

Research Design. In order to qualitatively measure the effectiveness of the Triadic model of programming on high SES youth, the program will be evaluated by a quasi-experimental study.

The study will include a control group and experimental group, a pre-test and post-test, an intervention, and data analysis. *See Appendix D: Research Design.*

Study Sites. The control group will be located at Calavera Hills Middle School (CHMS) and the experimental group will be at the AOMS campus. These schools were determined based on their location in the high SES community of Carlsbad.

Participant Recruitment. Sixth grade students will be screened and selected for participation by SMF researchers at sixth grade registrations. Parents will be asked to complete the screening, consent. Necessary study information will be disclosed. The first 100 students that meet qualifications of a high SES household will be assigned to the group.

Instrument Development and Pilot Testing. The measurement instrument for this study is the validated and reliable CHKS, which was created and obtained through WestEd. To measure parent skill competency and knowledge, and parent/youth involvement, SMF and an evaluation consultant will create evaluations with those constructs. *See Appendix C: Workplan.*

Staff Training. SMF staff will be trained in each component of the program and interpretation of the CHKS results. SMF staff will train English teachers at AOMS to assist with implementation and periodic support.

Intervention vs. Control Protocol. The CHMS control group will receive standard substance abuse prevention programming administered each year in school (Red Ribbon Week). The experimental group will receive standard programming, plus the newly designed components. All students will be offered the programming at the close of the study should it prove to be more effective. The effectiveness of the programming with the experimental group will be based on the CHKS administered evaluation in the fall of sixth grade (pre-) and spring of eighth grade (post-). Changes in both groups, such as students moving schools, will be recorded. *See Appendix C: Workplan.*

Social Marketing Plan

Target Population

The Natural High Prevention Platform (NHPP) is designed for a target market including youth, parents, educators and the community of Carlsbad (See Appendix E: Social Marketing Materials). As described in the needs assessment, Carlsbad is a high SES, north coastal community of San Diego County.

Social marketing efforts will focus on youth and parents within the community's singular school district with nine elementary, three middle, and one high school, serving more than 10,000 students (Carlsbad Unified School District, 2009). The NHPP includes web-based applications geared toward high SES parent, youth and community populations.

The NHPP will focus on augmenting existing prevention programming at Carlsbad middle schools. SMF staff will provide Carlsbad teachers with a basic knowledge of the NHPP, to encourage student and parent participation and assist with troubleshooting. The NHPP will be a low-maintenance, high-interaction tool to maximize impact.

The Product

The NHPP is an internet web-portal, providing a single access point to substance abuse prevention programming, developed to meet the needs of the intervention target population. The NHPP will provide access to substance abuse prevention materials in a user friendly, appealing format. Participants will register for a password-protected account, making the program private, engaging, multi-functional, and available at any time from any location. The NHPP will supplement RRW programming and provide a strategic suite of prevention tools.

The key components of the NHPP for youth are a web-based Natural High video, the Natural High e-Journal, and a space to search for and record community service experiences. The student section of the NHPP will be independent of the parent section to encourage youth comfort

and candor with privacy within the portal. Parents will experience a web-based Natural High parent/child interaction video, and a home risk assessment and survey. The community will be engaged in prevention programming through a public forum to share news, discuss events, and promote programs. Each user will create a private profile to access these NHPP components.

The NHPP will enable SMF to measure usage and impact, implement surveys, and record feedback concurrently. SMF will have administrative access to monitor application usage, time spent online and the number of unique and repeat visits. SMF staff or web master will ensure that NHPP is being used appropriately within pre-determined user guidelines. Users will be apprised of and asked to agree with term of use before activating an account. Data gathered by SMF will help guide NHPP improvement and further engagement of the target audience.

Price

Social marketing expenses include the design, development, and promotion of the NHPP web portal and substance prevention tools. Video development and production costs may be underwritten by community agencies and partners including: Carlsbad School District; Carlsbad Police Department; California Highway Patrol; and the North Coastal Prevention Coalition. SMF will assume maintenance costs including web mastering, survey and evaluation of utilization and impact. Promotional expenses will be borne by sponsorships with the action sports and music industries with which SMF already has strong ties.

Barriers to parent participation include lack of awareness and resistance to recognize that youth are at-risk. High SES families, headed by two full-time professionals and students overscheduled with sports, lessons, and social activities may be discouraged from participating in substance abuse prevention activities, due to time constraints. Interactive and incentive-based activities provide an alternative for time-crunched families. Youth may be hesitant to participate due to peer influences and feedback that using the NHPP is not the “cool” thing to do. Therefore,

youth may see their reputations as a cost. NHPP marketing and promotional activities aim to position the program as an appealing, viral brand name within the Carlsbad community.

Place

The web-based nature of the NHPP is an optimal venue for access from work, home, school, or remote user locations to alleviate the perceived cost of user time and add convenience.

Promotion

Promotion of the NHPP will occur through a marketing strategy on Facebook and Twitter, community events, RRW, and community bulletin boards. A poster series *(See Appendix E: Social Marketing Materials)* aimed at parents will feature messages reminding them to talk to their kids about substance abuse and to visit the NHPP. The posters will appear in school e-newsletters to parents, local coffee houses, gyms, and locations frequented by the target population. All marketing materials will be designed to target the high SES Carlsbad population, speaking to their unique needs and lifestyle.

Educators will encourage NHPP participation during RRW and throughout the year. Youth and parents will be able to seek information from educators about the NHPP, but SMF and partners will provide primary guidance. Educators will encourage parents to use the NHPP during parent-teacher conferences, back-to-school nights, and PTA meetings.

The NHPP will be promoted with the help of community partners including: community clinics; Youth Enrichment Services (YES), which includes more than 30 community service agencies; the North Coastal Prevention Coalition; and the Switchfoot Bro-Am. The Switchfoot Bro-Am is a local surf contest sponsored by the highly acclaimed band Switchfoot. It carries positive youth messages, and is well attended and popular among the target population. SMF will offer incentives to engage the population, endorse the NHPP, and steward existing users by receiving feedback on ways to improve the program.

Cultural Competency Plan

Involvement of Target Population

SMF, the sponsoring organization, has a 14-year history of providing substance prevention programming to youth, parents, and schools across the U.S. (Sundt Memorial Foundation, 2009). Foundation staff members have extensive personal, professional, and educational experience in prevention, social work, mental health, and working with diverse populations. The SMF research team conducted substance use prevention surveys, interviews, and focus groups to increase their knowledge specific to the high SES culture and its respective ethnicities. The needs assessment provided guidance toward program development for a high SES student/parent group of 68 percent Caucasian, 13 percent Latino, 7 percent Asian, 3 percent African American, and a remainder of other ethnicities. 88 percent of parents have some college to graduate school education (CUSD, 2009). The NHPP was developed specifically for a high SES multiethnic population and will be marketed through the SMF, which has an existing relationship with the CUSD through the Natural High video series distribution. The Natural High videos represent ethnic and gender diversity through their choice of celebrity figures. SMF will also have access to all current materials that have been gathered by the Sundt research team regarding the target population and their unique situation and needs, to be used in further development of the NHPP and its related products.

Training and Staffing

SMF staff will complete additional cultural competency training in conjunction with NHPP program implementation to ensure familiarity with the AOMS and CHMS family compositions. AOMS educators are considered culturally competent from their educator training and current work with the target population. SMF will provide training to AOMS educators on the NHPP so they may more effectively engage high SES youth and parents focusing on the importance of its utilization. Professional translation and cultural experts will evaluate cultural competency of

materials and their proposed implementation for cultural sensitivity, making additional recommendations as needed.

Community Representation

SMF staff and their board will engage a diverse group of the Carlsbad public and private-sector community in promotion and sponsorships of the NHPP and related substance abuse prevention activities. One of the ways community organizations will become involved is through community service opportunities available to the youth, volunteering with the agencies. An inclusive mix of stakeholder organizations including but not limited to law enforcement, education, businesses, and health care providers will help maximize youth participation and appeal to various youth interests. SMF will create an advisory board of community members from stakeholder organizations, staff from AOMS, district staff, and AOMS parents with their youth. The advisory board will meet at least quarterly to oversee the appropriate implementation with the target population and review any feedback from the community or participants. SMF, with three staff members and four board members, will strive to increase the ethnic and community diversity of its organization as additional members are recruited in order to effectively represent a wider base of ethnic backgrounds.

Language

While English-speakers make up the majority of the AOMS population, up to seven percent of students and parents are English learners, primarily Spanish speakers (CUSD, 2009; California Department of Education, 2009). All programs, media and materials will be available in English and Spanish, to ensure maximum participation and to eliminate potential exclusion. Other languages for translation will be evaluated based on need after the initial pilot program has concluded. New video creation, web content and related materials will be made available for English and Spanish speaking students and adults. Existing videos and materials will be subtitled or

translated into Spanish. Evaluation materials used at both AOMS and CHMS (control group) are currently available in English and Spanish.

All translated materials will be reviewed, pre-testing, with a Spanish speaking audience to ensure comprehension. In order to provide onsite translation for tutorials, or school and community events (both marketing and training), SMF will establish community partnerships with local high school and college student volunteers, who already tutor youth in Spanish.

Materials

The primary material for the program is included in the web-based platform. To meet the needs of the high-SES population, web access provides convenient and easy access to all families. The NHPP website will be designed with equivalent and separate access for English and Spanish speakers. Informative flyers with instructional login information, printed training materials for teachers to instruct students, and marketing materials will also be available in both languages. All printed materials and web-based materials will be pre-tested and screened by the advisory committee to ensure cultural and developmental relevance for the target group.

The language of all materials created by SMF for NHPP will be standardized to maintain consistency and convey respect to high SES participants. "Youth" and "students" will be used as opposed to terms that may be more demeaning, such as, "adolescents," "kids," or "children." Furthermore, "parent or family member" will be used instead of "adults," to reinforce the concept that "adults" are to be "parents" and inclusive of other family members who are involved in parenting youth. The CHKS evaluation tool is currently available in Spanish.

Evaluation Plan

NHPP intervention components will be evaluated in duality, to determine their impact upon decreasing substance use in high SES youth and an increasing parental involvement in substance abuse prevention programs. Peer-reviewed literature on substance use prevention interventions in high SES populations is scarce; as their unique characteristics have been primarily studied by psychologists. SMF will create evidence-based substance abuse prevention programming for youth in high SES communities, and may share findings with substance prevention program experts and the community. Data gathered through the evaluation process will serve as a model for future programming efforts with high SES populations, Carlsbad, and communities facing similar challenges.

Evaluation Design

Program objectives are the framework for quantitative and qualitative evaluation, and the global target towards substance use prevention by high SES youth. Objectives will be measured through data collection and analysis of pre- and post-test measurement of self-reported substance use by experimental group participants receiving NHPP with RRW programming and a control group receiving standard RRW programming. Sixth grade students will be screened and selected for participation by Sundt researchers at sixth grade registrations. Parents will be asked to complete the screening, and necessary study information will be disclosed. The first 100 students that meet qualifications of a high SES household at each school will be assigned to the corresponding group and parental consents obtained. Outcome and process measurements for experimental participants will use several methods including: website and login data; website survey feedback; parent knowledge of household substance abuse risk; parent knowledge of youth engagement; and youth self-reported substance use and resilience factors.

Outcome objectives two and three address parental understanding of youth substance abuse prevention methods and engagement with their youth. SMF will provide the tool for a household substance risk assessment with the assistance of an evaluation consultant. Parent knowledge of household risk will be measured quantitatively each year and will be compared to the initial assessment. Objective three, parental knowledge of how to communicate with youth about substance use after video viewing, is measured with test results reflecting skill competency increase at the end of three years, to evaluate increased communication skills. Participation will be measured through unique identifiers generated through NHPP log-ins, applications visited, time spent at each application, return rates of completed electronic or hard copy assessments, and test results. Natural High e-Journaling, objective four, will be evaluated through linguistics analysis of youth writings to identify themes and keywords, quantified and compared over three years through NVivo software (www.qsrinternational.com), administered by an external evaluation consultant. Objective one, our main goal of decreasing actual substance use, and objective five, community service hours to increase connectedness to school and community, will be quantitatively measured by the CHKS over the three-year period of this study.

Process objectives six and seven pertain to fiscal sustainability. SMF staff, through the review of fundraising results, financial reports, and budget adherence will monitor fiscal health. Objective eight, the final process objective, is the creation of an advisory board of parents, youth, community, and school members to ensure cultural relevancy, implementation oversight, and support throughout the programming.

Evaluation Measures

Primary evaluation measures of the NHPP are youth substance use and resilience from the CHKS, and demographics for intervention and control group participants. Parent demographics include: age; gender; education level; ethnicity; primary language spoken in the home; and

household income based on U.S. Census and SANDAG 2009 Estimates scales. Youth demographics captured in Module A of the CHKS include: age; gender; grade level; ethnicity; and migrant status.

The CHKS, Module A: Core and Module B: Resilience Supplement, middle school versions were created by WestEd (WestEd.org) in 1997. CHKS was tested for reliability and validity by the Center for Research on Adolescent Health and Development (Constantine, Benard, Diaz, 1999 & Constantine & Benard, 2001). CHKS will be administered as a pre- and post-test to the control and experimental groups in grades six and eight. These grades are significant for school transitions to middle and high school, a critical period in the development of youth risk behaviors and substance use (Flay, 2002 & Rutter, 1987). Youth risk behavior and resilience data is reflective of the Triadic model's protective factors: connectedness to home; school; and community (Flay, 2002) are measured by the CHKS.

CHKS is approved and supported by the Centers for Disease Control (CDC, 2009), the California Department of Education, and the California Attorney General's Office (Austin & Skager, 2008). Federal regulations implemented in 2001 (Cho, et al., 2009) require schools to conduct a CDC Youth Risk Survey annually. The CHKS complies with SAMHSA guidelines (Gandhi, et al., 2007) to standardize national outcome measurements for evidence-based substance prevention practices. Module A captures core substance and protective factors of home and peers collected on a five point Likert-type scale of youth perception of school, neighborhood, and adult connectedness ranging from "Strongly Disagree" to "Strongly Agree" and "Not True At All" to "Very Much True" (four point scale). Self report of substance use includes alcohol, tobacco, pills, marijuana, chew, and cigarettes. Use is quantified during lifetime, past 30 days, age at initiation of use with numerical scales of time in days and age. Youth perception of associated harm is evaluated on a four point harm scale, and three point approval/disapproval scale.

Module B, a 33 item supplemental resilience survey, measures risk and protective factors of stress, peer influences, likelihood to use substances, and interpersonal connectedness (Rutter, 1987 & Flay, 2002). Items are measured on a four-point scale of "Not at all true" to "Very much true."

Evaluation Methods

SMF will conduct ongoing analysis of data to be supplied to the CUSD on a regular basis or as requested. SMF and CUSD staff will provide research information and tools to obtain informed consent from families of participants. SMF staff is responsible for collection and maintenance of data, including demographics and NHPP measurements. WestEd will be contracted to provide raw data, results, and reports from the CHKS to CUSD and SMF.

An external evaluation consultant specializing in substance prevention and public health will work with the SMF team and CUSD from program initiation to provide expertise and oversight, ensuring high-quality data collection and analysis. All assessments, demographic and other data measurements will be reviewed by the evaluator prior to implementation with the target population. The evaluator will also provide database development, and regular review of outcome and process measurements to verify appropriate methodologies and research integrity are upheld.

Database

An Access database will be developed with assistance from the external evaluator, as a user-friendly data entry point with variables, demographics, and outcome measures defined and built into drop down menus. By choosing Access, SMF will be able to train less-costly data entry staff or volunteers to use the system. Statistical analysis will be provided by the evaluator, but simpler queries may be conducted by SMF staff.

Closing

Study strengths include its development from peer-reviewed research, supporting interventions identified for high SES communities, which will provide some regional seminal data

on this population. The longitudinal study length of three years is a strength and will provide stronger returns of information on effectiveness than single intervention and cross-sectional studies. Another strength is the real-time process and outcome data, collected by SMF through the NHPP, which allows the external evaluator to provide ongoing analysis as the study progresses. This use of web technology contributes to reliable and easily obtained data through electronic collection. Having the experimental and control groups comprised of youth from two different schools adds to the validity of the study. Independent and external evaluation, add strength to outcomes through the prevention of programmer bias, inherent in substance prevention programs (Gandhi, et al., 2007). Engagement between SMF, the Sundt research team, and Carlsbad's community school district, provides strength and stakeholder ownership in this niche study.

A possible limitation to this study is attrition from family relocation. SMF staff and CUSD will make every attempt to follow students through the duration of the study. With a small sample size, and focus on a single community, generalizing study results to a larger population, will be limited. The potential confounders will be minimized by SMF and CUSD staff but remains a possible limitation at every point of the study. Another limitation is that there is an inherent bias among participant families, in that those families willing to participate are naturally more willing to be engaged as parents.

The advisory board provides an additional strength through the inclusion of the community, parents, youth and the school with the SMF research staff to ensure that implementation and subsequent results are utilized with integrity. The advisory board can provide recommendations for future community substance initiatives and further research in other communities. SMF has a tremendous opportunity to create a positive youth impact by decreasing substance use in high SES youth.

Natural High Prevention Platform 3 Year Budget				
Expense Category	**Academic Year 2010**	**Academic Year 2011**	**Academic Year 2012**	**Total**
Personnel Expenses				
Executive Director (20% yr. 1, 30% yrs. 2 & 3, 30%)	$13,000.00	$19,500.00	$19,500.00	$52,000.00
Marketing & Communications Manager (15% yr. 1, 25% yr. 2, 15 % yr. 3)	$6,750.00	$11,250.00	$6,750.00	$24,750.00
Administrative Assistant (15% yr. 1, 30% yrs. 2 & 3, 30%)	$5,250.00	$10,500.00	$10,500.00	$26,250.00
Fringe Expense (33%)	$5,528.00	$5,528.00	$5,528.00	$16,584.00
Total Personnel Expenses	**$30,528.00**	**$46,778.00**	**$42,278.00**	**$119,584.00**
Operational Expenses				
Fax/Copies	$500.00	$500.00	$500.00	$1,500.00
Postage	$100.00	$100.00	$100.00	$300.00
Office Supplies	$500.00	$500.00	$500.00	$1,500.00
Mileage	$300.00	$400.00	$300.00	$1,000.00
Total Operational Expenses	**$1,400.00**	**$1,500.00**	**$1,400.00**	**$4,300.00**
Other Expenses				
Education and Promotional Materials	$1,000.00	$1,639.00	$1,000.00	$3,639.00
Graphic Design for Print and Web Materials	$4,000.00	$4,000.00	$3,000.00	$11,000.00
NHPP Web Design and Maintenance	$16,000.00	$5,000.00	$5,000.00	$26,000.00
Server Space	$1,000.00	$0.00	$0.00	$1,000.00
IT Support	$1,000.00	$1,000.00	$1,000.00	$3,000.00
Advertising	$1,000.00	$2,000.00	$464.00	$3,464.00
Video Production	$40,000.00	$40,000.00	$40,000.00	$120,000.00
Language Translation - NHPP Video and Materials	$2,500.00	$2,500.00	$2,500.00	$7,500.00
Gratitude Packs for Video Talent	$700.00	$700.00	$700.00	$2,100.00
Incentives and Promotional Giveaways	$500.00	$1,500.00	$500.00	$2,500.00
Total Other Expenses	**$67,700.00**	**$58,339.00**	**$54,164.00**	**$180,203.00**
Evaluation Expenses				
Evaluator Consulting Fee ($125/hr)	$10,625.00	$6,875.00	$13,125.00	$30,625.00
NVIvo Licensing and Maintenance	$714.00	$0.00	$0.00	$714.00
California Healthy Kids Survey License	$2,525.00	$0.00	$2,525.00	$5,050.00
Duplication and Presentation Costs	$1,500.00	$1,500.00	$1,500.00	$4,500.00
Total Evaluation Expenses	**$15,364.00**	**$8,375.00**	**$17,150.00**	**$40,889.00**
Subtotal	**$114,992.00**	**$114,992.00**	**$114,992.00**	**$344,976.00**
Indirect Expenses (19%)	$21,848.48	$21,848.48	$21,848.48	$65,545.44
Total Program Expenses	**$136,840.48**	**$136,840.48**	**$136,840.48**	**$410,521.44**

Budget Justification

The Natural High Prevention Platform is a three-year program with four budget categories including: personnel; operating; evaluation and other expenses. The Sundt Memorial Research team estimates that the program budget will total $143,052, each year for three years, for a total cost of $429,157.

Personnel Expense The Natural High Prevention Platform and surrounding programs and partnerships will require the expertise of SMF staff members and outside consultants. Although this program will require more staff time when it is fully launched, the development phase will only require time from existing staff. Personnel costs peak in the second year, as relationships develop between SMF, Aviara Oaks Middle School, and the Carlsbad community.

Operational Expenses Since many of the activities conducted with the Natural High Prevention Platform will be web-based, mail costs will be low. Office supplies will include materials not already at the SMF offices. Mileage will account for round trips to and from Carlsbad, originating from the Sundt office in La Jolla, again, increasing in year two.

Other Expenses Education and promotional materials are essential to help raise awareness of the program and attract parental attention to the NHPP. Incentives and promotional giveaways will help interest and retain youth and parents in the development phase. Both educational materials and incentives and giveaway costs will increase in year two, to help with participation education and retention. Professional graphic design will help maintain a consistent through line and the signature, edgy feel of Natural High.

The design and maintenance of the web platform will be one of the most costly components of the program. NHPP web platform design includes web navigation, web pages, forms, e-journals, customizable content and page appearance, back-end administration and reporting, and easy-to-use content management software to allow for fresh content at little cost to SMF. Server space is

necessary to support the platform; ensuring users have a quick and convenient web experience. Information technology support will also be required to troubleshoot any problems with the platform.

SMF has historically produced Natural High videos for youth, but this program focuses upon parent-youth interaction videos as part of the intervention. One new video will be released each year for the three years of the study. The videos, educational and promotional materials will be translated into Spanish, appearing in subtitles and additional brochures. SMF will secure volunteer talent but steward their participants with Natural High thank you gifts.

An evaluator, contracted by SMF, will create the survey design and the back-end analytics, to administer and auto score the online *household substance abuse risk assessment*. The evaluator will also be instrumental with the interpretation of the NHPP's e-journal entries by employing NVivo software to capture qualitative trends. Finally, the evaluator will help translate the results of the California Healthy Kids Survey to SMF, the primary evaluation instrument in the study. Licensing for both the California Healthy Kids Survey and NVivo software are necessary, as these are the optimal evaluation tools for the program.

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Literature Review Matrix

Citation	Target population	Intervention Program	Measures	Study Limitations	Recommended for Further Research	Results/Findings
1) Bogard, K.L. (2005). Affluent adolescents, depression, and drug use: The role of adults in their lives. *Adolescence, 40* (158), 281-306.	374 Affluent adolescents, 7th graders, 92% caucasian, from 2 affluent middle schools studied longitudinally through high school	Examines the role of the parent and adults in relationships with affluent adolescents when personally troubled or upset, and their report of drug use and depression. Quantitative analysis of qualitative and quantitative data.	Children's Depression Inventory. Substance use through Monitoring the Future Study Survey. Inventory of Parent and Peer Attachment. Social Support.	Self reports. Affluent population has not been frequently studied, larger samples needed to increase generalizability.	Author recommends qualitatively exploring drug use in the affluent adolescent, population study of non-whites, and more developmental based research.	Low parental closeness is a significant risk factor in affluent youth while other adult support persons may buffer the risk. Low parental closeness or connectedness is the degree of warmth perceived by children from their parents, includes interest, structure and predictability at home, quality listening, supervision, etc. Peer popularity among boys was indicative of substance use rates. Girls seek support through peers more frequently than boys. Importance for substance use programming to begin peer interventions early. SMF intervention with parents will improve parent connectedness to enhance resilience.
2) Buckley, E.J., & White, D.G. (2007). Systematic review of the role of external contributors in school substance use education. *Health Education, 107* (1), 42-62.	Lit review of 114 reports (53 published, 61 unpublished) related to external contributors (anyone other than teacher at school) in delivering school-based drug, alcohol and tobacco education programs.	Value of "external contributors in delivering school-based prevention programs" in primary or secondary schools.	An electronic review of articles. 42 were found to be methodogically sound with pre and post intervention program evaluations with various program instructors, including police, nurses, social workers, health educators, actors, psychologists, peers, youth workers. Domains measured were behavior, knowledge, attitudes, intentions, mediators.	Lit review excluded reports that used technologies or resources developed by external contributors for use by teachers. Meta-analysis not possible due to varied outcome domain measures in each program. Measures were generalized by authors.	Author recommends more outcomes based measurement of students perception of effectiveness and larger long term studies to confirm true effectiveness of peer educators.	Pupils enjoy content delivered by external contributors. Scare tactics are ineffective at intervention according to research. "Active" methods such as group discussion and role-play appear to be more effective. Content and educators should be matched the needs of the target population. External content will be provided by NHPP videos and interventions. Peer educators could be considered for future intervention enhancement.
3) Flay, B. (2002). Positive youth development requires comprehensive health promotion programs. *American Journal of Health Behavior, 26* (6), 407-424.	Lit review of programs, 5-8th grade, elementary age, K-12, 175 articles, including review of other large meta-analyses, author applies thesis of triadic model to program design, includes review of Positive Action (PA) program.	Cultivation of positive social contexts improve behavior through comprehensive long-term school wide interventions involving the community and family. PA program, K-12 curriculum at 100 elementary schools, included all SES categories.	Review of existing theories of risk behavior including reasoned action, planned behavior, social learning, cognitive theory, social ecology, social development. Measures of PA program included school attendance, achievement, discipline, suspensions, vrim, violence, substance use.	Lit review and expert opinion, not original research, PA Program largely reviewed. Support of larger theoretical model but has significant program design implications.	Author recommends comprehensive program design and improved outcome measurement to develop confidence in program effectiveness.	Triadic Influence=Social/normative beliefs, Cultural/environmental attitudes, Biology & personality>self efficacy. Triadic model incorporates all other risk behavior theories. Link prevention with school and home life, all problem behaviors (drugs, sex, crime, violence) are linked. Risk behaviors are RARE in preadolescents. Programs should involve parents actively, culturally and developmentally appropriate. SMF intervention adopts a triadic approach to improving resilience and parent connectedness.
4) Hanson, M.D. & Chen, E. (2007). Socioeconomic status and substance use behaviors in adolescents: The role of family resources versus family social status. *Journal of Health Psychology, 12* (1) 32-35.	113 Adolescents, racially and economically diverse	Test of association of SES factors and substance use in adolescents, differentiating financial resources from social status.	Health Behaviors Questionnaire, Hollingshead Four Factor of Social Status, family income & savings, parent education & occupation.	Cross sectional with no control, teen reported SES not as valid as parent reported, small sample, single geographical region, reduces generalizability to other populations.	Authors recommends studies in larger populations and regions, and increased analysis of why high SES adolescents use more substances in order to improve programming.	Teens with higher financial & social status use substances more often than low SES teens. Financial resources were more of a predictor of substance use than family social status.

Literature Review Matrix

Citation	Target population	Intervention Program	Measures	Study Limitations	Recommended for Further Research	Results/Findings
5) Meschke, L.L. & Patterson, J.M. (2003). Resilience as a theoretical basis for substance abuse prevention. *Journal of Primary Prevention, 23* (4), 483-514.	120 articles cited, past decade of published studies on resiliency.	Protective mechanism & resilience research review. Effective programs-Life Skills Training, other 2 yr programs with early early adolescents.	Risk and protective factors associated with individuals and peersfrom previous publications, review of various programs addressing risk and protective factors. Resiliency.	Lit review and program recommendations only. Not original research. Discrepancy in literature of peer vs individual protective factors due to poor question design.	Author recommends improved analysis of protective factors associated with community. Mor focus needed on protective factors instead risk factors.	Ecosystems framework-family, community, school, peers. Social contexts. Protective factors are more influential childhood to adolescence!! Peer mentors. Developmentally appropriate programs reinforcing decision making, peer/family/school involvement. Improvement of parent connectedness, community involvement of students through service, and developmentally appropriate content to be provided during SMF intervention.
6) Gandhi, A.G., Murphy-Graham, E., Petrosino, A., Chrismer, S.S., & Weiss, C.H. (2007). The devil is in the details: Examining the evidence for "proven" school-based drug abuse prevention programs. *Evaluation Review, 31* (1), 43-74.	Substance prevention programs serving primary and secondary students. Life Skills, Project Alert, CASASTART, Project Northland, MPP	Review of methods and evidence used to determine program effectiveness.	Review of six governing agencies' program effectiveness processes and selection. No specific measurement tools were identifies. Measures of proof of effectiveness were generally self reported substance use, frequency, type of substance.	Multiple outcome measures are collected from the programs studied making it difficult to do a side by side comparison of the programs. This limiitation is the key point of the article. Randomization was not consistent.	Authors recommend reviewing updated SAMSHA guidelines with new scoring criteria . Schools should use valid criteria nd research based programs so program effectiveness in the school can be determined	Overall, there is limited evidence of actual program effectiveness due to absence of independent evaluations. Funding and governmental agencies creating effective program lists do not use the same evaluation criteria. Recent model for program effectiveness is now available through SAMSHA since October 2009.
7) Longshore,D.,Ellickson,P.L., McCaffery,D.M., & St. Clair, P.A. (2007). School-based drug prevention among at-risk adolescents: effects of ALERT Plus. *Health Education & Behavior, 34* (4) 651-658.	1383 7th grade adolescents to 9th grade at-risk (prior marijuana or tobacco use prior to 7th grade) students from 45 South Dakota school clusters.	Project ALERT drug prevention curriculum: ALERT (7th and 8th grade classes) versus Project ALERT Plus (extended program to 9th grade with 5 booster classes). Randomized, quasi-experimental design with pre-post test.	The South Dakota Evaluation-perceived consequences of substance use and prevalence, peer approval of use, intentions to use, resistance factors, saliva specimens, self-reported use, family demographics.	Self-report data. Lost to follow-up effects could not be eliminated. The definition of risk, if related to socioeconomic status may create different results.	Authors recommend data analysis of future program outcomes be based on gender differences and the reasons for their difference.	Extended program with increased training reinforcing social norms against substance and parental involvement had larger effect on girls (girls were less likely to use than boys after training) who are more influenced by peers and parents than boys. Previous studies showed at risk groups would continue to use or increase use from substance prevention training but this study disproved this concept and showed general programming in all schools could decrease use among kids likely to use.
8) McMahon, T.J., & Luthar, S.S. (2006). Patterns and correlates of substance use among affluent suburban high school students. *Journal of Clinical Child & Adolescent Psychology, 35* (1), 72-89.	292 Affluent suburban teens, 10-12th grade, 54% girls	Identifies patterns of change and substance use, and other psychosocial adjustments in communities in affluent social settings. Cross sectional assessments at grades 10,11, 12.	Monitoring the Future Survey-substance use frequency by self report. Revised Children's Manifest Anxiety Scale-severity of anxiety. Children's Depession Inventory. Self Report of Delinquency Checklist. Teacher/Child Rating Scale-school adaptive behavior. Academic Performance. Compared a cluster of students reported to use frequently to a cluster reporting little use.	Cross section analysis of cohort population. Geographical location of Connecticut only. The research design had confounding relations in substance use, socioeconomic context, ethnicity, and school culture. Small sample resulting in limited statistical power may obsure some meaningful factors.	Authors recommend looking at developmental pathways specifically within high SES youth to design better interventions for their population.	Results of study showed more depression, increased substance use and higher anxiety among affluent youth, increased use occurred with increased peer acceptance. Affluent youth are self medicating related to emotional distress, decreasing academic performance and increasing deliquent behavior.

Literature Review Matrix

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9) Miller-Day, M. (2008). Talking to youth about drugs: What do late adolescents say about parental strategies? *Family Relations, 57*, 1-12.	2 separate related studies. #1-421 freshman college students in northeast U.S. 83% Caucasian. #2-424 respondents of same demographic	Cross-sectional analysis of parent-child communication, parental strategies used to deter childrens' substance use and family communication environments	Demographics, Open-ended questions to elicit information on parental communication (qualitative responses coded), relationship of parent to child, and self report substance use. Concepts measured included judgement, tolerance rules, information provided, threat of punishment, rewards for nonuse, family communication patterns.	Frequency of strategy use, differences between father-mother strategies, or different offspring strategies were not examined. Only one parent was questioned. Operationalization of parental strategies was not ideal. Religiosity was not examined so may have affected results.	Author recommends development of a conceptual model of parent-child communication of anti-drug socialization to improve parenting programming in substance prevention.	Core parenting strategies & communcation styles. At least half of parents did not address the issues of abstinance at all. Clear family rules were most effective in antidrug socialization. Consensual and open discussion styles along with zero tolerance appaer to be more effective but were not statistically significant. Programming should include more information to parents that just "talk to your kids".
10) Schoench, D. (2007). Developing a virtual community to prevent teen substance abuse: Lessons learned. Journal of Technology in Human Services, 25 (3), 81-100.	Teens and their parents from a local school class, a drug treatment program, an after school program, and teens at housing complexes	Development, implementation and use of a virtual community on the internet over 3.5 years	Knowledge, attitudes, norems, perceived abilities, and intention to use substances. Specific measures were not specified	Evaluation measures were not considered when virtual community was developed. This made the collection of web data difficult.	SMF team recommends utilizing a validated substance prevention measurement tool to evaluate all future virtual programming	A resiliency model was used to build virtual tools but was not easy to evaluate. Delivery of content over the web increases dissemination. Youth identified with peers and youth topics related to substance. Three and a half years was not enough tijme to implement a comprehensive online program. Content and ease of development conflicted with maintaing youth interest. All agencies and users do not have the same technical infrastructure.
Cho, H., Hallfors, D.D., Iritani, B.J., & Hartman, S. (2009). The Influence of "No Child Left Behind" Legislation on Drug Prevention in U.S. Schools. *Evaluation Review, 33* (5), 446-463.	U.S. schools since the passage of NCLB. Respondants were district substance coordinators or district offices.	Survey of school districts, schools, and their substance prevention curriculum to evaluate how they have responded to federal policy changes.	Using web, paper, phone survey data from SEA (state education agencies) and population-based samples of school districts to assess substance use funding, priority of activities, district size, most used middle-school curriculum, number using evidence-based curriculum,.	District sample was limited to U.S. school districts with middle school grades and does not represent universe of school districts. Inconsistencies in some responses to the funding transfer questions. Self-reported activity priority rating. 33% of schools is misleading since large districts were representative of larger numbers of kids.	SMF research team recommends further review of federal, state and local policy to determine the effect on local programming	33% of school districst have implemented evidence -based curriculum. There is a disconnect between what is funded and what NCLB says. Large school districts use more evidence-based materials because they have more money. Funding is not equitable and some districts don't take advantage of all funding sources. There are disparities between federal, state & local priorities. Overall, little influence of NCLB drug policy on prevention programs. Carlsbad Unified School District does not follow official evidence based curriculum but has adopted portions of several progams. SMF intervention will provide evidence of effectiveness with research design and outcome measurements.
Haegerich, T.M. & Tolan, P.H. (2008). Core competencies and the prevention of adolescent substance use. *New Directions for Child and Adolescent Development, 122,* 47-60.	Review of adolescent substance abuse prevention programs.	Core competencies framework as viewed through developmental and ecological perspectives.	Positive sense of self, self control, decision making skills, moral system of belief, pro-social connectedness.	Much of previous research focused on risks and failures rather than normative development. Limited self report may not accurately reflect effectiveness of program.	Authors recommend etiological research that focuses on the developmental-ecological context of adolescents and substances. More sophisticated measurement techniques are needed to measure outcomes of competencies.	Youth are less likely to use when they have a positive future orientation. Also, when they have belief in the ability to resist, emotional and behavioral control, sound decision-making, and the belief that substances are wrong. Suggests a strong relationship with prosocial peers and family. Programs must focus on core competencies not didactic knowledge. Prosocial connectedness with parents and future orientation are being addressed through SMF intervention with parent/child engagement and online ejournaling for youth to set future goal achievement as a protective factor from substance use.

Literature Review Matrix

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Hegamin, A., Anglin,G.M., & Casanova, M. (2002). Deconstructing the concept of "special populations". *The Journal of Drug Issues, Summer,* 825-836.	Special Populations: adolescents, women, people of color, disabled, gay & bisexual men, HIV positive people,	Panal discussions of the "unique treatment needs of special populations" concerning substance use.	Heterogeneity of populations. Seeks to conceptualize the diversity of needs in populations.	Mostly older contributing articles.	SMF research team recommend looking for special funding opportunities for the "special population" of high SES.	Supports the need to focus on all populations as opposed to just at-risk populations. The words "special populations" had potential to create misconceptions and stereotypes of other groups equally at risk but undefined.
Kulig, J.W., (2005). Tobacco, alcohol, and other drugs: The role of the pediatrician in prevention, identification, and management of substance abuse. *Journal of the American Academy of Pediatrics, 115* (3), 815-822.	Adolescents and pediatricians, clinical report and guidance article for clinicians. Article refers to periodic review of providers and the frequency of their substance use screening with adolescents. Review of current statistics and public health goals.	Health care provider identification of substance use as part of community approach to substance prevention in adolescents. Review of Health People 2010 Substance Use goals for children and adolescents to decrease all substance use and increase health education. Use of Monitoring the Future survey for implications and current stats of adolescent substance use. Review of risk and protective factors.	CRAFFT Substance abuse screening, validity of tool is referenced. Increased screening is advocated in this article for use by community heath care providers. Tool acronym is: C-car related risk behavior, R-use substances to relax, A-use substances alone, F-forget things after substance use, F-friends tell you to cut down on substance use, T-been in trouble associated with substance use	Not a study but a literature review and white paper advocating primary care screening as part of larger community involvement and intervention.	Author recommends Increased adherence and current measurement of community provider adherence to substance screening.	Health care providers are valuable community partners in assessing adolescent substance use and potential interventions. Article states only 50% of pediatricians were screening for substance abuse. There is a need for increased awareness of community health care provider involvement and adherence to recommendations to provide routine screening at medical appointments.
Luthar, S.S., & Latendresse, S.J. (2005). Children of the Affluent. *Current Direction in Psychological Science, 14* 2 (1), 49-53.	3 cohorts of affluent suburban youth, 264 10th graders, 302 middle schoolers, 3rd group recruited from second and measured in 11th grade	Evaluation of relationship between affluence & psychological manifestations as causes for substance use.	Depression , anxiety, & self reported substance use, childrens' perceptions of parenting.	Self reported substance use, qualitative measurement of youth perceptions may need further validation in context of social status.	Authors recommends looking a larger representative sample of affluent youth and risks associated with wealth and status.	Children of upper-class manifest disturbances through substance use, anxiety, and depression. The article suggests two factors of this: excessive pressure to achieve; and isolation from parents. Affluent youth are often overlooked and are not considered to be at-risk.
McMorris, B.J., Petrie, R.S., Catalano, R.F., Fleming,C.B., Haggerty, K.P., & Abbott, R.D. (2009). Use of web and in-person survey modes to gather data from young adults on sex and drug use: An evaluation of cost, time, and survey error based on a randomized mixed-mode design. *Evaluation Review, 33* (2), 138-158.	Raising Healthy Children Cohort, oringinal group of 1239 students, 386 final participants in web study of 12th grade students, 17-20 yrs old.	One-on-one interviews spring and fall versus web surveys. 274 items queried. Incentives to participate were provided.	Cost per interview. Time until completion. Rates of response. Response bias. Questions included: sexual behavior, substance use, work and school experiences, relationships with peers, family, and partners.	Sample size might not detect small yet significant differences. To minimize no response some phone surveys were conducted.	Authors recommend mixed mode survey combining interview, web and phone surveys have not been studied but may maximize participation according to the author.	Web surveys provide quality and effective evaluation data with increased participation and decreased cost. Web quizes and feedback tools will be utilized by SMF intervention, potential to include phone followup with participants exists and both provide good data.

Literature Review Matrix

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NIAAA. (2004/2005). Pyschosocial Processes and mechanisms of Risk and Protection. *Alcohol Research & Health, 28* (3), 143-154.	National Institute on Alcohol & Alcoholism white paper on adolescent risk and protective mechanisms	Examination of the theories or psychosocial processes that may lead to underage drinking.	Traits associated with alcohol use; poor self-regulation, impulsiveness, aggression, novelty-seeking, and negative affectivity.	Individual traits have not been shown to predict alcohol use, only have an association with alcohol use.	SMF team recommends correlation of risk and protective factors	This article suggests that "externalizing" the behaviors of early childhood may help to "predict alcohol use disorders in early adulthood".
Oetting, E.R. & Beauvais, F. (1987). Peer cluster theory, socialization characteristics, and adolescent drug use: A path analysis. *Journal of Counseling Psychology, 34* (2), 205-213.	415 11th-12th graders midsize western community.	Cross-sectional anonymous drug use self report.	Peer Drug Associations Style, School Adjustment Scale, Family Sanctions Scale, self reported drug use.	Results did not necessarily prove the peer theory but found a correlation. The analysis they did could not provide definbitive causation	SMF team recommends further correlation between peer cluster theory and	Peer cluster theory=norming of attitudes, values, beliefs includes drug use/need to conform is unlikely to be changed by post-use therapy, counseling. Changing peer cluster is key, choice of peers, sanctions against use in peer groups, and tough minded family sanctions against drug use are needed
Paglai, A. & Room, R. (1999). Preventing substance use problems among youth: A literature review and recommendations. *Journal of Primary Prevention, 20* (10), 3-50.	177 articles cited/reviewed, Midwestern prevention program (MPP)-Multilevel community approach, including media and social influence.	School-based, knowledge only. Psychosocial-social influencing most effective with interactive component, Mass Media campaigns, Health warning labels, Community-based programs, Family-based programs, Multilevel community programs, Policies and regulations.	Literature review of program designs.	MPP (late 80's) groups not equivalent SES and only quasi not random controlled studies. Poor data on prevention programs, mainly inductive data.	Author recommends cost effectiveness analysis of programs, more programming evaluation on engaging adults in prevention.	Comprehensive strategies most effective due to changing social norms and values. Programs depend on drug being prevented. Prevention programs must take into account the "fun" element (Warner, 1999) of peer influence. There is media influence on real life norming for kids. Positive adult models lead to self efficacy. One time/shot programs are not effective. Peer influence effective with peer leaders + teachers. Discusses media influence. Alternate activity programs + sports are effective (Norman, 1997). Findings support development of SMF NHPP platform-media, repetitive programming over 3 years, increasing involvement and improving effectiveness of parents, fun element to programming, and promotion of Natural High alternative activities to drugs.
Payne, A., Gottfredson, D.C., & Gottfredson, G.D. (2006). School predictors of the intensity of implementation of school-based prevention programs: Results from a national study. *Prevention Science, 7* (2), 225-237.	544 schools nation wide and their prevention programs.	Studied the relationship between school and program characteristics and the implementation quality of programs.	Several measures: Implementation intensity measures -Organizational capacity, Local program development, Principal support, Integration into school operations. Exogenous community measures.	The use of intensity as measure if other aspects of implementation are affected by external factors such as community. Cross-sectional nature of data may exclude program frequency. Overall low school response rate may not allow generalization of rate between urban, suburban and rural population of youth.	SMF team recommends local programming be evaluated for effectiveness of implementation along with program effectiveness to determine if implementation processes can be improved locally.	There was significant relationships found between implementation intensity and school and program factors. These factors where local program development process, integration in to school operations, organizational capacity, principal support, and standardization. Excellent models of effective implementation.

Literature Review Matrix

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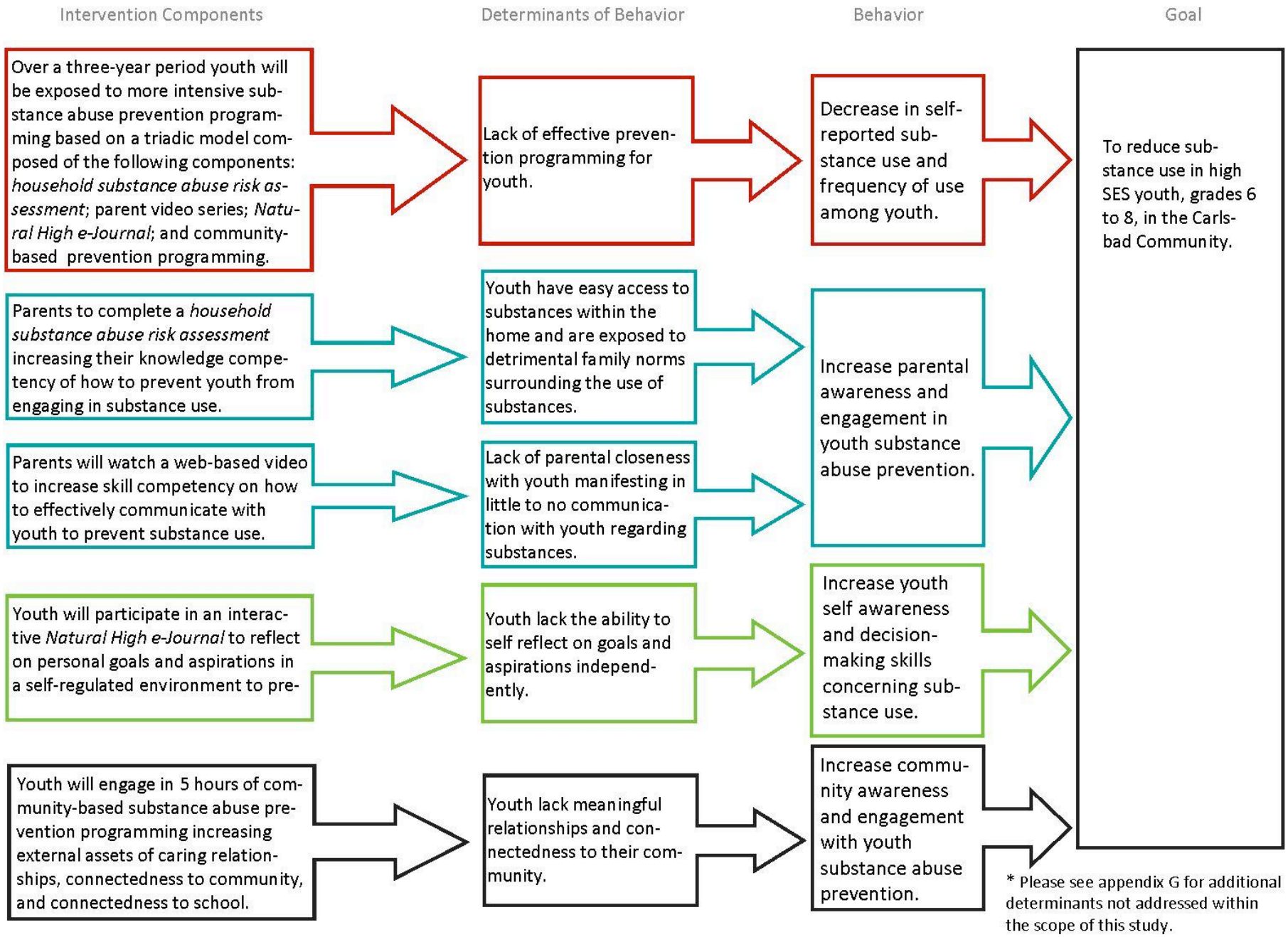
Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry, 57* (3), 316-331.	Children, youth , and adults focused on mechanisms in children. Seminal article cited repeatedly in prevention literature.	Compilation and summary of resilience studies and results.	Marital discord & child disturbance, temperamental adversity & parental criticism, conduct disorder & parent child relationship, parenting & supportive spouse, gender differences.	Some subjects were raised in homes for abandoned children. Life turning points such as adolescence , school changes, and personal autonomy need more investigation since they are stressors that effect substance use.	Author recommends studies of adjusted healthy population to generalize results. This has been accomplished by subsequent literature validating his concepts.	Alteration of risk factors & their level of exposure may reduce risk impact. Protective mechanisms such as supportive parenting can reduce impact of negative chain reactions. Protective mechanisms can help to negate risk factors. Attachment and parent/child relationships directly impact self esteem & efficacy. Parent/child engagement is being enhanced wth SMF intervention.
Weissberg, R.P., Kumpfer, K.L., & Seligman, M.E.P. (2003). Prevention that works for children and youth: An introduction. *American Psychologist, 58* (6/7), 425 - 432.	Statement paper on children and youth	Coordinated and research-based initiative promoting broad health promotion and competence enhancement to reduce risk and increase protective factors.	Long-term outcomes, cost effectiveness, cost benefit, accountability of program implementation.	Prevention theory and policy are constantly evolving so comparisons of programs is difficult.	Authors recommend ongoing review of policy and program updates with regards to evolving programming and community coordination.	Certain criteria must be included in prevention programming: Age specific, culturally appropriate, fosters social skills and ethical values, trains and selects skilled staff, only uses evidence-based programs, incorporates environmental, community & family support.
Spoth, R., Redmond, C., Shin, C., & Azevedo. (2004). Brief family intervention effects on adolescent substance intitiation: School-level growth curbe analyses 6 years following baseline. Journal of Consulting and Clinical Psychology, 72, (3), 535-542.	667 6th graders & their families (86% 2-parent families) 33 rural schools in 19 Mid-west counties	7 1 hr sessions/7 wks of Iowa Strengthening Families Program vs. 5 2 hr sessions/5 wks Preparing for the Drug-Free Years Program-designed to strengthen parent and child skills, risk/protective factors peer resistance, Experiemental with control group	Written questionnarie administered by trained interviewers-composite substance use of lifetime alcohol use, use without parental permission, lifetime drunkeness, cigarette, marijuana use, past month use, chewing tobacco use. Followup at 6 yrs post intervention	Final data analysis included 304 students from 23 schools at the 6 yr completion. Inconsistencies in lifetime substance use self reports. Small samples at some sights confounded the data. Possibly less generlizability to urban populations.	Author alludes to the need to study urban population with similar interventions to validate outcomes.	Good evidence of engaging families together with decreased initiation, proved theory based riskand protective factors can have positive long term decrease use outcomes. Both interventions slowed substance use initiation but ISFP was more significant. ISFP-more sessions & more student involvement. SMF intervention is providing ongoing support to youth through ejournaling and annual changes to programming videos to improve long term engagement with substance prevention.
Ansary, N., & Luthar, S. (2009). Distress and academic achievement among adolescents of affluence: A study of externalizing and internalizing problem behaviors and school performance. *Development and Psychopathology, 21*, 319-341.	289 high SES 10th graders, 256 in final sample of 12th graders, 79% Caucasian, in the northeast U.S.	Two cross-sectional data collections to identify bidirectional links of problem behaviors including substance use and academic achievement of high SES youth.	Household income, Monitoring the Future survey-Substance use self report, The Self Report Delinquincy Checklist-substance use, drunk in public, sold marijuana, marijuana use, Children's Depression Inventory-depressive symptomatology, Revised Child Manifest Anxiety Scale-worry & physiogical anxiety, demographics, academic grades, Teacher report of classroom adjustment, Peer report-validation of troublemaker types, likes to party, likes to be alone.	Lack of control group allows generlizability only to highest SES. No link was explored between drug type and achievement.	Authors recommend exploring the same connections but analyzing based on different economic levels within high SES group to determine if those at the lower end of high SES are overrepresented.	Parents and educators should be concerned about perceived "benign" behaviors such as marijuana use as bidirectional links to delinquincy and poor academic achievement. Misperception exists among parent and educators related to "teens just being teens". Interventions suggested include early intervention to prevent marijuana use initiation, increase connectedness to parents, after school supervision, parent education about seriousness of drug prevention.

Literature Review Matrix

Citation	Target population	Intervention Program	Measures	Study Limitations	Recommended for Further Research	Results/Findings
Donnelly, J., Young, M., Pearson, R., Penhollow, T., & Hernandez, A. (2008). Area specific self esteem, values, and adolescent subtance use. *Journal of Drug Education, 38* (4), 389-403.	700 students, grades 6-12 in southern school district.	Cross-sectional analysis of 3 domains of self esteem and how they related to substance use and prevention, and other health behaviors.	Demographics, Kelley Short-Form of the Hare Self-Esteem Scale measures self esteem areas of peer, home and school. Substance use self report	Single school district, self reports.	Authors insinuate need to study larger groups in other locations to be able to generalize results.	General self esteem accounted for little effect on substance use. Area specific self esteem to home, peer & school was more important to protect from substance use. Programs that focus on overall self esteem may not be effective. There is a misconception that global self esteem plays an important role in substance prevention. SMP intervention focused on parent (home) esteem factors.

BDI Logic Model



OBJECTIVE	IMPLEMENTATION ACTIVITIES	TIMELINE	PERSON (S) RESPONSIBLE	PROCESS & OUTCOME MEASURES
1. From the beginning of the school year 2010 through the end of the school year 2013, Carlsbad youth, grades 6 to 8 at Aviara Oaks Middle School, will demonstrate a decrease by 20 percent, the number of high SES youth that participate in substance use, as measured by the California Healthy Kids Survey.	• Design programming that specifically targets high SES youth. • Maintain Natural High Prevention Platform to keep the interest of the target population. • Continue to research substance use and high SES youth and the programs that are effective. • Continue creating community awareness and involvement. • Continue to incorporate parents in new and inventive ways. • Work with the Carlsbad Unified School district to gain timely access to the California Healthy Kids Survey.	August 2010 to June 2013: Implementation of new programming targeting high SES youth. June 2010: Pre assessment of substance use amongst students. June 2013: Post assessment of substance use amongst students.	Sundt Memorial Foundation. Aviara Oaks Middle School; administration, teachers, and students. Carlsbad Unified School District. Parents of targeted high SES youth. Carlsbad Community.	**Process:** None **Outcome:** There will be a 20 percent decrease in substance use in Carlsbad youth, grades 6 to 8, over a three-year period. **Evaluation Measures:** California Healthy Kids Survey will provide data of youth substance use to measure a 20 percent decrease based on the following constructs: self-reported substance use (including alcohol use, tobacco use, and non-prescription and prescription drug use); frequency of use and past 30 days youth,
2. From the beginning of Red Ribbon Week 2010 to the end of Red Ribbon Week 2012, 75 parents at Aviara Oaks Middle School who complete a *household substance abuse risk assessment* will demonstrate a 15 percent increase in knowledge competency of how to prevent their youth from engaging in substance use, as measured by a knowledge assessment to be created by Sundt Memorial Foundation external consultant, reviewed and collected annually, over three years.	• Determine necessary funding needed to create assessment and secure the funding. • Sundt Memorial Foundation will work with consultant to design a *risk assessment* evaluation based on research. • Aviara Oaks Administration will provide the *risk assessment* by mail and email to all 100 parents of youth in the experimental group. • Aviara Oaks Administration will provide parent education concerning the *risk assessment*. • The *risk assessment* will be available in multiple languages to enable maximum participation. • Aviara Oaks Middle School will identify an Administrator or Program Coordinator to collect responses and analyze data.	January 2010 to October 2010: Design assessment. October 2010, 2011, & 2012: Parents will receive *risk assessments* one week prior to the start of Red Ribbon Week. Return rate will be assessed at the end of Red Ribbon Week. November 2012: Data collection and analysis of responses and assessments over the course of three years.	Aviara Oaks Middle School Administration. Sundt Memorial Foundation. Independent consultant to work with Sundt Memorial Foundation.	**Process:** None **Outcome:** 75 parents at Aviara Oaks Middle School will increase their knowledge by 15 percent of how to prevent their youth from engaging in substance use, over three years. **Evaluation Measures:** Sundt Memorial Foundation will develop a knowledge assessment. The constructs of the assessment will include the following: family relationships, access to substance within home, parenting styles, and family norms of substance use.

OBJECTIVE	IMPLEMENTATION ACTIVITIES	TIMELINE	PERSON (S) RESPONSIBLE	PROCESS & OUTCOME MEASURES
3. By the end of Red Ribbon Week 2011, 75 parents at Aviara Oaks Middle School who watch a web-based video, will demonstrate a minimum of 15 percent skill competency increase in how to effectively communicate with youth to prevent substance use, as measured by pre- and post-video assessment answers, collected and reviewed by Sundt Memorial Foundation.	• Script, film and produce web-based video. • Write quiz questions for each section of video to test parent knowledge of effective youth communication. • SMF will record and assess participation by tracking unique participant ID codes on video use and test on the website. • Obtain appropriate level approvals at Carlsbad Unified School District of video content and messaging. • Sundt Memorial Foundation to provide tutorial of web-based video to Aviara Oaks Middle School English teachers. • Aviara Oaks Middle School to distribute video link and expectations to all 100 parents of youth in experimental group. • Sundt Memorial Foundation to provide necessary supplemental information to support video. • Sundt Memorial Foundation to provide technical and content support for video.	January 2011 to August 2011: production of web-based video. September 2011: Sundt Memorial Foundation will provide tutorial to Aviara Oaks Middle School. October 2011: Video will be ready for dissemination by the first day of Red Ribbon Week.	Sundt Memorial Foundation staff will produce the video and provide support. Aviara Oaks Middle School Administration to disseminate video link. Carlsbad Unified School District.	**Process:** None **Outcome:** 75 parents at Aviara Oaks Middle School will demonstrate a minimum of 15 percent skill competency increase in how to effectively communicate with youth, to prevent substance use. **Evaluation Measures:** Sundt Memorial Foundation and an external evaluation consultant will create a pre-and post-assessment to be administered with online video viewing. A quantitative, Likert scale will measure parent skill competency in how to communicate with youth. Video completion rate will show parent involvement.
4. Between Red Ribbon Week 2011 and Red Ribbon Week 2012, 100 students at Aviara Oaks Middle School who participate in an interactive *Natural High Electronic Journal*, will demonstrate a 10 percent increase in their ability to set goals in a self-regulated environment to prevent substance use, as measured by entry records, collected and analyzed by a program coordinator, and the California Healthy Kids Survey.	• Sundt Memorial Foundation will design content and graphics for an e-journal that elicits thought on setting goals and aspirations. • Seek approval from Carlsbad Unified School District of all content and the use of the e-journal. • Sundt Memorial Foundation will find a web designer to set up the e-journal. • Sundt Memorial Foundation will train all teachers at Aviara Oaks Middle School in the purpose and	January 2011 to June 2011: Sundt Memorial Foundation will design and complete the e-journal. July 2011 to August 2011: Carlsbad Unified School District will approve e-journal for dissemination. September 2011: Sundt Memorial Foundation will train all teachers in the purpose and use of the e-journal.	Sundt Memorial Foundation Staff. Aviara Oaks Middle School Teachers. Carlsbad Unified School District Administration. Web Designer to work with Sundt	**Process:** None **Outcome:** 100 Aviara Oaks Middle School students will demonstrate a 10 percent increase in their ability to set goals in a self-regulated environment to prevent substance use, through a *Natural High Electronic Journal.* **Evaluation Measures:** Use of NVivo to measure qualitative ability to set goals in the online self-regulated environment (e-journal). California Healthy Kids Survey will be used (post-assessment) to measure quantitative ability to

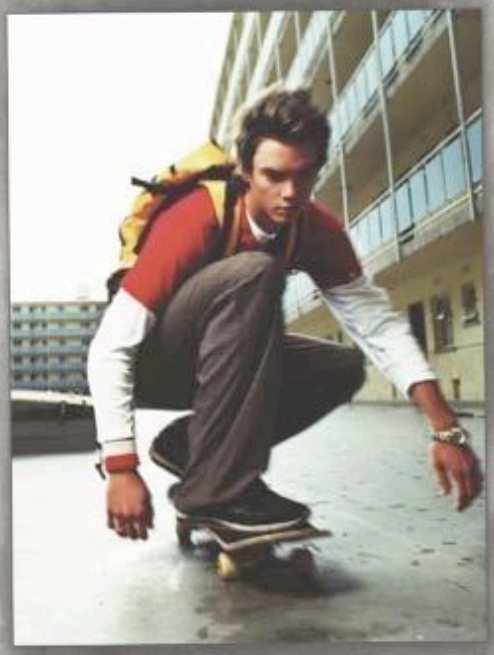
OBJECTIVE	IMPLEMENTATION ACTIVITIES	TIMELINE	PERSON (S) RESPONSIBLE	PROCESS & OUTCOME MEASURES
	use of the e-journal. • Aviara Oaks Middle School teachers will introduce the journal to students and help them set up accounts. • Students will be encouraged that there is no right or wrong way to journal, and that their journal is completely confidential. • Sundt Memorial Foundation will field all questions concerning the e-journal or the website.	October, 2011: Teachers will fully engage all students in the e-journal by the end of Red Ribbon Week.	Memorial Foundation to set up e-journal.	set goals on their own.
5. By December 31, 2010, Sundt Memorial Foundation will secure $45,700 to produce a web-based video targeting high SES parent/youth interaction regarding substance use.	• Sundt Memorial Foundation will determine necessary budget for creating web-based video. • Sundt Memorial Foundation will discuss grant-seeking opportunities from private sources. • Sundt Memorial Foundation will discuss fundraising opportunities. • Sundt Memorial Foundation will review annual revenue reports and properly steward received donations.	December 31 2010: Funding to be secured, and recurring as needed.	Sundt Memorial Foundation Board and Staff.	**Process:** Review annual fiscal reports and proposed project budgets. Secure full funding of $45,700. **Outcome:** None **Evaluation Measures:** None
6. By December 31, 2010 Sundt Memorial Foundation will have secured $22,000 to design a *Natural High interactive website,* targeting high SES youth, for the purpose of increasing their self-awareness of goals and aspirations to prevent youth substance use amongst youth.	• The Sundt Memorial Foundation will determine the necessary budget for creating and maintaining an e-journal. • Sundt Memorial Foundation will discuss grant-seeking opportunities from private sources. • Sundt Memorial Foundation will discuss fundraising opportunities. • Sundt Memorial Foundation will review annual revenue reports and properly steward received donations.	December 31 2010: funding to be secured.	Sundt Memorial Foundation Board and Staff.	**Process:** Review annual fiscal reports and proposed project budgets. Secure full funding in the amount of $22,000. **Outcome:** None **Evaluation Measures:** None

OBJECTIVE	IMPLEMENTATION ACTIVITIES	TIMELINE	PERSON (S) RESPONSIBLE	PROCESS & OUTCOME MEASURES
7. By the end of the school year 2013, 100 students at Aviara Oaks Middle School, who completed 5-hours of community-based substance abuse prevention programming will demonstrate a minimum of 15 percent favorable increase in the following three areas as measured by the California Healthy Kids Survey: external assets of caring relationships, connectedness to community, and connectedness to school.	• Aviara Oaks Middle School Counselors will engage the community to identify community-based substance abuse prevention curriculum for student participation. • Aviara Oaks middle School Counselors will develop a relationship with the California Highway Patrol and their existing substance abuse prevention programs. • Aviara Oaks Middle School Counselors and Carlsbad High School Counselors will approve community service hours submitted by students. • Aviara Oaks Middle School counselors will work with Carlsbad High School Counselors to ensure students are properly tracked and hours are properly recorded for graduation. • Aviara Oaks administration will introduce requirement to students.	2010: Several community-based opportunities will be identified and logged. 2011: Counselors at Aviara Oaks Middle school will work collaboratively with counselors at Carlsbad High School to ensure the process of recording and reporting hours is efficient and effective. August 2012: Aviara Oaks Middle School administration will introduce the community service programming requirements to students.	Aviara Oaks Middle School Counselors. Aviara Oaks Middle School administration. Carlsbad High School Counselors. Community partners: California Highway Patrol, North County Lifeline, etc.	**Process:** None **Outcome:** 100 Aviara Oaks Middle School students will demonstrated a 15 percent favorable increase in external assets of caring relationships, connectedness to community, and connectedness to school. **Evaluation Measures:** California Healthy Kids Survey Module A and B, administered to 100 Aviara Oaks Middle School students in grade 6 (pre-test) and grade 8 (post-test) will measure external assets of caring relationships, connectedness to community, and connectedness to school. WestEd will provide scoring of survey's to Sundt Memorial Foundation and evaluation consultant.
8. By the first day of school 2010, Sundt Memorial Foundation will develop an advisory board of 10 stakeholder members, representative of parents, youth, community partners, and school leaders, to provide ongoing consultation of the *Natural High Prevention Platform*.	• Target community partners to serve on advisory board. • Students of the Carlsbad community to serve on advisory board. • Target school leaders / Carlsbad Unified School District to serve of advisory board. • Parents of the Carlsbad community to serve on advisory board. • Secure meeting space. • Determine who will oversee the advisory board, Sundt Memorial Foundation program coordinator, or executive director. • Set advisory board calendar of meetings and distribute.	May 2010 to August 2010: Identify advisory board members in the community. August 2010: Finalize meeting schedule and terms. August 2010: Hold first Advisory board meeting August 2010 to June 2013: Advisory board to meet consistently.	Sundt Memorial Foundation program coordinator and executive director.	**Process:** Identify and form an advisory board, minimum ten members, to provide ongoing consultation of the *Natural High Prevention Platform.* **Outcome:** None. **Evaluation Measures:** None.


Quasi-Experimental
Identified Carlsbad School District
Screen sixth grade population at Aviara Oaks and Calavera Hills Middle Schools
Identify 200 students (100 from each school) from high-SES families
Aviara Oaks Middle School (experimental group)
Calavera Hills Middle School (control group)
100 sixth graders at Aviara Oaks Middle School
100 sixth graders at Calavera Hills Middle School
Healthy Kids Survey (pre-test administered in the Fall 2010/sixth grade)
Healthy Kids Survey (pre-test administered in the Fall 2010/sixth grade)
Current Red Ribbon Week Programming & the following Intervention Programs:
1. Natural High e-Journal
2. Household Risk Assessment
3. Parent/Child Interaction video
4. New community service requirements
Current Red Ribbon Week Programming (no interventions)
Healthy Kids Survey (post-test administered in Spring of 2013/eighth grade)
Healthy Kids Survey (post-test administered in the Spring of 2013/eighth grade)
Assess outcomes of two groups

THE NATURAL HIGH PREVENTION PLATFORM

login | PARENTS | STUDENTS | COMMUNITY | SMF



THE PLATFORM LOGIN

Email Address:

Password:

LOGIN

Not a registered user? click here to sign up today!

The Platform:
- Interactive tools to learn more about substance use.
- Creative, fun easy to use methods of prevention for parents, students, and community organizations.
- Private, safe, and research based.

NATURAL HIGH

The Platform is brought to you by the Natural High Video Series, The Sundt Memorial Foundation, and The Carlsbad Community.

www.theplatform.org

THE NATURAL HIGH PREVENTION PLATFORM

Student Platform

NATURAL HIGH 4 VIDEO

Watch it here!
Powerful messages from America's Top Celebrities and Athletes about living drug free !!!

click to play

NATURAL HIGH E-JOURNAL

What inspires you, What are your goals, aspirations and dreams? Stay focused on what matters - write it down, visit it often!

click to enter

NATURAL HIGH COMMUNITY SERVICE FORUM

Find new and exciting ways to get involved in substance abuse prevention programming in your community.

Log your community service hours here.

click to enter

NATURAL HIGH

ARE YOU AND YOUR CHILD SHARING PRESCRIPTIONS?

Over the past decade-and-a-half, the number of teen and young adult (ages 12 to 25) new abusers of prescription painkillers such as oxycodone (OxyContin) or hydrocodone (Vicodin) has grown **FIVE-FOLD** (from 400,000 in the mid-eighties to 2 MILLION in 2000).

Source: 2001 National Household Survey on Drug Abuse, SAMHSA, 2002

THE NATURAL HIGH PREVENTION PLATFORM

- Interactive tools to learn more about your children and substance abuse.
- Parent risk-assessment - could you be contributing to your child's substance abuse?
- Signs of substance abuse.
- Private, safe and research-based prevention methods for you, your child and the community.

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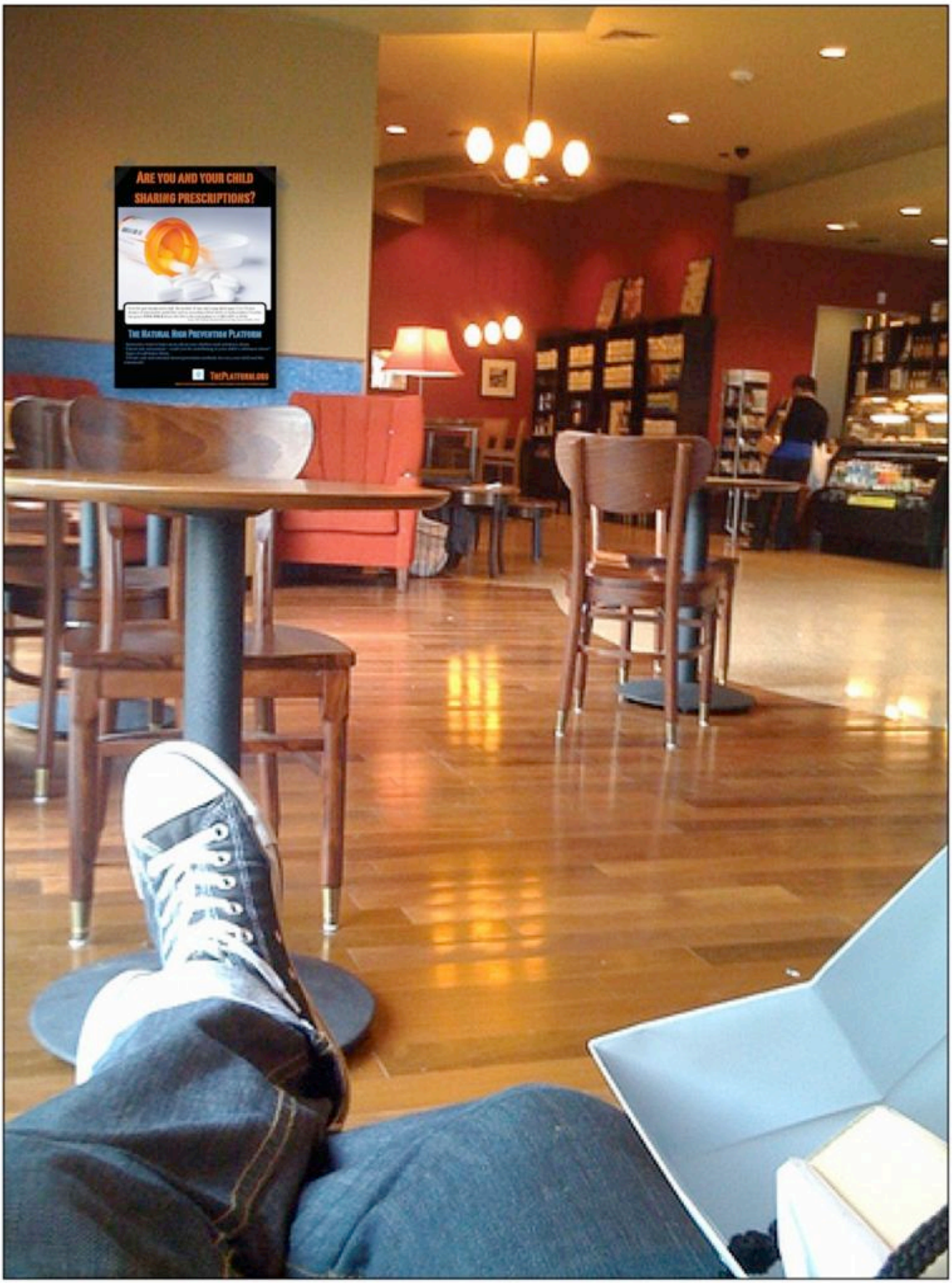
BROUGHT TO YOU BY THE NATURAL HIGH VIDEO SERIES, THE SUNDT MEMORIAL FOUNDATION & THE CARLSBAD COMMUNITY


ARE YOU AND YOUR CHILD
SHARING PRESCRIPTIONS?
THE NATURAL HIGH PREVENTION PLATFORM

◆ Module A ◆

Middle School Questionnaire

2009-2010

This survey asks about your behavior, experiences, and attitudes related to health, well-being, and schooling. It includes questions about use of alcohol, tobacco, and other drugs; bullying and violence; and what you do at school and how you feel about it.

You do not have to answer these questions, but your answers will be very helpful in improving school and health programs. **You will be able to answer** whether or not you have done or experienced any of these things.

Please do not write your name on this form or the answer sheet. Do not identify yourself in any other way.

Please mark all of your answers on the answer sheet. Fill in the bubbles neatly with a **#2 pencil**. Do not write on the questionnaire. Mark only one answer unless told to ***"Mark All That Apply."***

This survey asks about things you may have done during different periods of time, such as during your **lifetime** (for example, did you ever do something?), or the past **12 months**, or **30 days**. Each provides different information. Please pay careful attention to these time periods.

Thank you for taking this survey!

◆ Module A ◆

Begin by writing your school's name at the top of the answer sheet.

A1. **Fill in the bubble for the letter "M."**

A2. **Fill in the bubble for the number "3."**

Next, we would like some background information about you.

A3. **How old are you?**

- **A)** 10 years old or younger
- **B)** 11 years old
- **C)** 12 years old
- **D)** 13 years old
- **E)** 14 years old
- **F)** 15 years old
- **G)** 16 years old
- **H)** 17 years old
- **I)** 18 years old or older

A4. **What is your sex?**

- **A)** Male
- **B)** Female

A5. **What grade are you in?**

- **A)** 6th grade
- **B)** 7th grade
- **C)** 8th grade
- **D)** 9th grade
- **E)** 10th grade
- **F)** 11th grade
- **G)** 12th grade
- **H)** Other grade
- **I)** Ungraded

A6. **How do you describe yourself? *(Mark All That Apply.)***

- **A)** American Indian or Alaska Native
- **B)** Native Hawaiian or Pacific Islander
- **C)** Asian or Asian American
- **D)** Black or African American (non-Hispanic)
- **E)** Hispanic or Latino/Latina
- **F)** White or Caucasian (non-Hispanic)
- **G)** Other

A7. **If you are Asian or Pacific Islander, which groups best describe you? *(Mark All That Apply).* If you are <u>not</u> of Asian/Pacific Islander background, mark "A. Does not apply."**

- **A)** Does not apply; I am not Asian or Pacific Islander
- **B)** Asian Indian
- **C)** Cambodian
- **D)** Chinese
- **E)** Filipino
- **F)** Japanese
- **G)** Korean
- **H)** Laotian
- **I)** Vietnamese
- **J)** Native Hawaiian, Guamanian, Samoan, or other Pacific Islander
- **K)** Other Asian

◆ Module A ◆

A8. **If you are Hispanic or Latino/Latina, which groups best describe you? *(Mark All That Apply).* If you are <u>not</u> of Hispanic background, mark "A. Does not apply."**

- **A)** Does not apply; I am not Hispanic or Latino/Latina
- **B)** Central American
- **C)** South American
- **D)** Cuban
- **E)** Mexican
- **F)** Puerto Rican
- **G)** Other Hispanic

A9. **In the past three years, were you part of the Migrant Education Program or did your family move to find work in agriculture?**

- **A)** Yes
- **B)** No
- **C)** Don't know

Next, please mark on your answer sheet how TRUE you feel each of the following statements are about your SCHOOL and things you might do there.

*How strongly do you agree or disagree with the following statements about your **school**?*

		Strongly Disagree	Disagree	Neither Disagree Nor Agree	Agree	Strongly Agree
A10.	**I feel close to people at this school.**	A	B	C	D	E
A11.	**I am happy to be at this school.**	A	B	C	D	E
A12.	**I feel like I am part of this school.**	A	B	C	D	E
A13.	**The teachers at this school treat students fairly.**	A	B	C	D	E
A14.	**I feel safe in my school.**	A	B	C	D	E

At my school, there is a teacher or some other adult ...

		Not At All True	A Little True	Pretty Much True	Very Much True
A15.	**who really cares about me.**	A	B	C	D
A16.	**who tells me when I do a good job.**	A	B	C	D
A17.	**who notices when I'm not there.**	A	B	C	D
A18.	**who always wants me to do my best.**	A	B	C	D
A19.	**who listens to me when I have something to say.**	A	B	C	D
A20.	**who believes that I will be a success.**	A	B	C	D

◆ Module A ◆

At school, ...

		Not at All True	A Little True	Pretty Much True	Very Much True
A21.	**I do interesting activities.**	A	B	C	D
A22.	**I help decide things like class activities or rules.**	A	B	C	D
A23.	**I do things that make a difference.**	A	B	C	D

The next statements are about what might occur outside your school or home, such as in your NEIGHBORHOOD, COMMUNITY, or with an ADULT other than your parents or guardian.

Outside of my home and school, there is an adult ...

		Not At All True	A Little True	Pretty Much True	Very Much True
A24.	**who really cares about me.**	A	B	C	D
A25.	**who tells me when I do a good job.**	A	B	C	D
A26.	**who notices when I am upset about something.**	A	B	C	D
A27.	**who believes that I will be a success.**	A	B	C	D
A28.	**who always wants me to do my best.**	A	B	C	D
A29.	**whom I trust.**	A	B	C	D

Outside of my home and school, ...

		Not at All True	A Little True	Pretty Much True	Very Much True
A30.	**I am part of clubs, sports teams, church/temple, or other group activities.**	A	B	C	D
A31.	**I am involved in music, art, literature, sports, or a hobby.**	A	B	C	D
A32.	**I help other people.**	A	B	C	D

A33. Did you eat breakfast today?

A) No

B) Yes

◆ Module A ◆

The next questions ask about the use of alcohol, tobacco, marijuana, and other drugs *without a doctor's order* (prescription for medical reasons).

Keep the following definitions in mind.

- **One drink of ALCOHOL**, or alcoholic drink (beverage), means one regular size can/bottle of beer or wine cooler, one glass of wine, one mixed drink, or one shot glass of liquor.
- Questions about alcohol do **not** include drinking a few sips of wine for religious purposes.
- **DRUG** means any substance, including pills and medications, used to get "high" ("loaded", "stoned", or "wasted") other than alcohol or tobacco.

*During your **life**, how many times have you used or tried ...*

		Number of Times					
		0 times	1 time	2 times	3 times	4-6 times	7 or more times
A34.	a cigarette, **even one or two puffs?**	A	B	C	D	E	F
A35.	a **whole** cigarette?	A	B	C	D	E	F
A36.	**smokeless tobacco** (dip, chew or snuff such as Redman™, Skoal™, or Beechnut™)?	A	B	C	D	E	F
A37.	**one full drink of alcohol** (such as a can of beer, glass of wine, wine cooler, or shot of liquor)?	A	B	C	D	E	F
A38.	**marijuana** (pot, weed, grass, hash, bud)?	A	B	C	D	E	F
A39.	**inhalants** (things you sniff, huff, or breathe to get "high" such as glue, paint, aerosol sprays, gasoline, poppers, gases)?	A	B	C	D	E	F
A40.	**derbisol** (DB, derbs, or dirt)?	A	B	C	D	E	F
A41.	**any other illegal drug or pill** to get "high"?	A	B	C	D	E	F

*During your **life**, how many times have you been ...*

		Number of Times					
		0 times	1 time	2 times	3 times	4-6 times	7 or more times
A42.	very drunk or sick after drinking **alcohol?**	A	B	C	D	E	F
A43.	"high" (loaded, stoned, or wasted) from using **drugs?**	A	B	C	D	E	F
A44.	drunk on alcohol or "high" on drugs **on school property?**	A	B	C	D	E	F

◆ Module A ◆

About how old were you the first time you did any of these things?

		Never	10 or under	Years of Age 11	12	13	14	15	16	17	18 or over
A45.	**Had a drink of an alcoholic beverage (other than a sip or two)**	A	B	C	D	E	F	G	H	I	J
A46.	**Smoked part or all of a cigarette**	A	B	C	D	E	F	G	H	I	J
A47.	**Used smokeless tobacco or other tobacco products**	A	B	C	D	E	F	G	H	I	J
A48.	**Used marijuana or hashish**	A	B	C	D	E	F	G	H	I	J
A49.	**Used any other illegal drug or pill to get "high"**	A	B	C	D	E	F	G	H	I	J

*During the past **30 days**, on how many **days** did you use ...*

		0 days	1 day	2 days	3 - 9 days	10 - 19 days	20 - 30 days
A50.	**cigarettes?**	A	B	C	D	E	F
A51.	**smokeless tobacco** (dip, chew or snuff)?	A	B	C	D	E	F
A52.	**at least one drink of alcohol?**	A	B	C	D	E	F
A53.	**five or more drinks of alcohol in a row, that is, within a couple of hours?**	A	B	C	D	E	F
A54.	**marijuana** (pot, weed, grass, hash, bud)?	A	B	C	D	E	F
A55.	**inhalants** (things you sniff, huff, or breathe to get "high" such as glue, paint, aerosol sprays, gasoline, poppers, gases)?	A	B	C	D	E	F
A56.	**any other illegal drug or pill to get "high"?**	A	B	C	D	E	F

*During the past **30 days**, on how many days **on school property** did you ...*

		0 days	1 day	2 days	3 - 9 days	10 - 19 days	20 - 30 days
A57.	**smoke cigarettes?**	A	B	C	D	E	F
A58.	**have at least one drink of alcohol?**	A	B	C	D	E	F
A59.	**smoke marijuana?**	A	B	C	D	E	F
A60.	**use any other illegal drug or pill to get "high"?**	A	B	C	D	E	F

*During the past **12 months**, ...*

		No	Yes
A61.	**have you talked with at least one of your parents [or guardians] about the dangers of tobacco, alcohol, or drug use?**	A	B
A62.	**have you heard, read, or watched any messages about not using alcohol, tobacco, or drugs?**	A	B

◆ Module A ◆

A63. How do you like to drink alcohol?

A) I don't drink alcohol
B) Just a sip or two
C) Enough to feel it a little
D) Enough to feel it moderately
E) Until I feel it a lot or get really drunk

How much do people risk harming themselves physically and in other ways when they do the following?

		How Much Risk or Harm			
		Great	Moderate	Slight	None
A64.	**Smoke cigarettes occasionally**	A	B	C	D
A65.	**Smoke 1-2 packs of cigarettes each day**	A	B	C	D
A66.	**Drink alcohol occasionally**	A	B	C	D
A67.	**Have five or more drinks of an alcoholic beverage once or twice a week**	A	B	C	D
A68.	**Smoke marijuana occasionally**	A	B	C	D
A69.	**Smoke marijuana once or twice a week**	A	B	C	D

How difficult is it for students in your grade to get any of the following substances if they really want them?

		Very Difficult	Fairly Difficult	Fairly Easy	Very Easy	Don't Know
A70.	**Cigarettes**	A	B	C	D	E
A71.	**Alcohol**	A	B	C	D	E
A72.	**Marijuana**	A	B	C	D	E

Think about a group of 100 students (about three classrooms) in your grade.
About how many students have done the following?

		Number of Students										
		0 (none)	10	20	30	40	50 (half)	60	70	80	90	100 (all)
A73.	**Smoke cigarettes at least once a month**	A	B	C	D	E	F	G	H	I	J	K
A74.	**Ever tried marijuana**	A	B	C	D	E	F	G	H	I	J	K

How do you feel about someone your age doing the following?

		Neither Approve Nor Disapprove	Somewhat Disapprove	Strongly Disapprove
A75.	**Smoking one or more packs of cigarettes a day**	A	B	C
A76.	**Having one or two drinks of any alcoholic beverage nearly every day**	A	B	C
A77.	**Trying marijuana or hashish once or twice**	A	B	C
A78.	**Using marijuana once a month or more**	A	B	C
A79.	**Carry a weapon to school**	A	B	C

A80. How do you think your close friends would feel about your smoking one or more packs of cigarettes a day?

A) Neither approve nor disapprove
B) Somewhat disapprove
C) Strongly disapprove

A81. In your <u>life</u>, how many times have you ridden in a car driven by someone who had been drinking alcohol?

A) Never
B) 1 time
C) 2 times
D) 3 to 6 times
E) 7 or more times

Next are questions about violence, safety, harassment, and bullying.

*During the past **<u>12 months</u>**, how many times **on school property** have you ...*

		0 times	1 time	2 to 3 times	4 or more
A82.	**been pushed, shoved, slapped, hit, or kicked by someone who wasn't just kidding around?**	A	B	C	D
A83.	**been afraid of being beaten up?**	A	B	C	D
A84.	**been in a physical fight?**	A	B	C	D
A85.	**had mean rumors or lies spread about you?**	A	B	C	D
A86.	**had sexual jokes, comments, or gestures made to you?**	A	B	C	D
A87.	**been made fun of because of your looks or the way you talk?**	A	B	C	D
A88.	**had your property stolen or deliberately damaged, such as your car, clothing, or books?**	A	B	C	D
A89.	**been offered, sold, or given an illegal drug?**	A	B	C	D
A90.	**damaged school property on purpose?**	A	B	C	D
A91.	**carried a gun?**	A	B	C	D
A92.	**carried any other weapon (such as a knife or club)?**	A	B	C	D
A93.	**been threatened or injured with a weapon (gun, knife, club, etc.)?**	A	B	C	D
A94.	**seen someone carrying a gun, knife, or other weapon?**	A	B	C	D

◆ Module A ◆

*During the past **12 months**, how many times **on school property** were you harassed or bullied for any of the following reasons?* [You were **bullied** if *repeatedly* shoved, hit, threatened, called mean names, teased in a way you didn't like, or had other unpleasant things done to you. It is **not bullying** when two students of about the same strength quarrel or fight.]

		0 times	1 time	2 to 3 times	4 or more
A95.	**Your race, ethnicity, or national origin**	A	B	C	D
A96.	**Your religion**	A	B	C	D
A97.	**Your gender (being male or female)**	A	B	C	D
A98.	**Because you are gay or lesbian or someone thought you were**	A	B	C	D
A99.	**A physical or mental disability**	A	B	C	D
A100.	**Any other reason**	A	B	C	D

A101. How safe do you feel when you are at school?

A) Very safe
B) Safe
C) Neither safe or unsafe
D) Unsafe
E) Very unsafe

A102. In a normal week, how many days are you home after school for at least one hour without an adult there?

A) Never
B) 1 day
C) 2 days
D) 3 days
E) 4 days
F) 5 days

A103. During the past 12 months, how many times did other students spread mean rumors or lies about you on the internet (i.e. Facebook™, MySpace™, email, instant message)?

A) 0 times (never)
B) 1 time
C) 2-3 times
D) 4 or more times

A104. Do you consider yourself a member of a gang?

A) No
B) Yes

◆ Module A ◆

A105. During the past <u>12 months</u>, did your boyfriend or girlfriend ever hit, slap, or physically hurt you on purpose?

A) Does not apply; I didn't have a boyfriend or girlfriend during the past 12 months
B) No
C) Yes

A106. During the past <u>12 months</u>, did you ever feel so sad or hopeless almost everyday for two weeks or more that you stopped doing some usual activities?

A) No
B) Yes

A107. During the past <u>12 months</u>, how would you describe the grades you mostly received in school?

A) Mostly A's
B) A's and B's
C) Mostly B's
D) B's and C's
E) Mostly C's
F) C's and D's
G) Mostly D's
H) Mostly F's

A108. During the past <u>12 months</u>, about how many times did you skip school or cut classes?

A) 0 times
B) 1-2 times
C) A few times
D) Once a month
E) Once a week
F) More than once a week

A109. How many questions in this survey did you answer honestly?

A) All of them
B) Most of them
C) Only some of them
D) Hardly any

▼ Module B ▼

Please mark on your answer sheet how you feel about each of the following statements.

How true do you feel these statements are about you personally?

		Not At All True	A Little True	Pretty Much True	Very Much True
B1.	**I have goals and plans for the future.**	A	B	C	D
B2.	**I plan to graduate from high school.**	A	B	C	D
B3.	**I plan to go to college or some other school after high school.**	A	B	C	D
B4.	**I know where to go for help with a problem.**	A	B	C	D
B5.	**I try to work out problems by talking or writing about them.**	A	B	C	D
B6.	**I can work out my problems.**	A	B	C	D
B7.	**I can do most things if I try.**	A	B	C	D
B8.	**I can work with someone who has different opinions than mine.**	A	B	C	D
B9.	**There are many things that I do well.**	A	B	C	D
B10.	**I feel bad when someone gets their feelings hurt.**	A	B	C	D
B11.	**I try to understand what other people go through.**	A	B	C	D
B12.	**When I need help, I find someone to talk with.**	A	B	C	D
B13.	**I enjoy working together with other students my age.**	A	B	C	D
B14.	**I stand up for myself without putting others down.**	A	B	C	D
B15.	**I try to understand how other people feel and think.**	A	B	C	D
B16.	**There is a purpose to my life.**	A	B	C	D
B17.	**I understand my moods and feelings.**	A	B	C	D
B18.	**I understand why I do what I do.**	A	B	C	D

How true are these statements about your FRIENDS?

I have a friend about my own age ...

		Not At All True	A Little True	Pretty Much True	Very Much True
B19.	**who really cares about me.**	A	B	C	D
B20.	**who talks with me about my problems.**	A	B	C	D
B21.	**who helps me when I'm having a hard time.**	A	B	C	D

▼ Module B ▼

My friends ...

		Not At All True	A Little True	Pretty Much True	Very Much True
B22.	**get into a lot of trouble.**	A	B	C	D
B23.	**try to do what is right.**	A	B	C	D
B24.	**do well in school.**	A	B	C	D

How true are these statements about your HOME or the ADULTS WITH WHOM YOU LIVE?

In my home, there is a parent or some other adult ...

		Not At All True	A Little True	Pretty Much True	Very Much True
B25.	**who expects me to follow the rules.**	A	B	C	D
B26.	**who is interested in my school work.**	A	B	C	D
B27.	**who believes that I will be a success.**	A	B	C	D
B28.	**who talks with me about my problems.**	A	B	C	D
B29.	**who always wants me to do my best.**	A	B	C	D
B30.	**who listens to me when I have something to say.**	A	B	C	D

At home ...

		Not At All True	A Little True	Pretty Much True	Very Much True
B31.	**I do fun things or go fun places with my parents or other adults.**	A	B	C	D
B32.	**I do things that make a difference.**	A	B	C	D
B33.	**I help make decisions with my family.**	A	B	C	D

Appendix G: Additional Determinants

Determinants not addressed within the scope of this study:

- Peer influences (individual and group norms);
- Excessive exposure to media glorifying substance use;
- Social Host Ordinance laws are new (October 22, 2009) within the Carlsbad community and not fully understood by parents and community members, increasing youth's access to substances;
- Marketing directed toward youth regarding substances; and
- Stores not adhering to laws pertaining to substance use by selling to youth.

Appendix H: Operational Definitions and Acronyms

Operational Definitions:

Youth – Children in grades sixth through eighth;

High-SES – As reported by the US Census Bureau, families with a median household income of $75,000 or higher; and

Substances – Alcohol, illicit drugs, licit drugs, and prescriptions drugs.

Frequently Used Acronyms:

RRW – Red Ribbon Week

SES – Socioeconomic Status

CUSD – Carlsbad Unified School District

AOMS – Aviara Oaks Middle School

CHMS – Calavera Hills Middle School

NHPP – Natural High Prevention Platform

CHKS – California Healthy Kids Survey

Appendix I: API Score Comparison

API Test Scores:

School	AOMS	Bell Middle School	Roosevelt International Middle School
API Score	879	702	784
Parent Education Level (1-5)*	3.94	2.78	2.43
Lunch Program Participants*	14	63	77

*Parent education level and lunch program participation are factors used to determine SES (http://data1.cde.ca.gov, 2007).

Appendix J: Triadic Model